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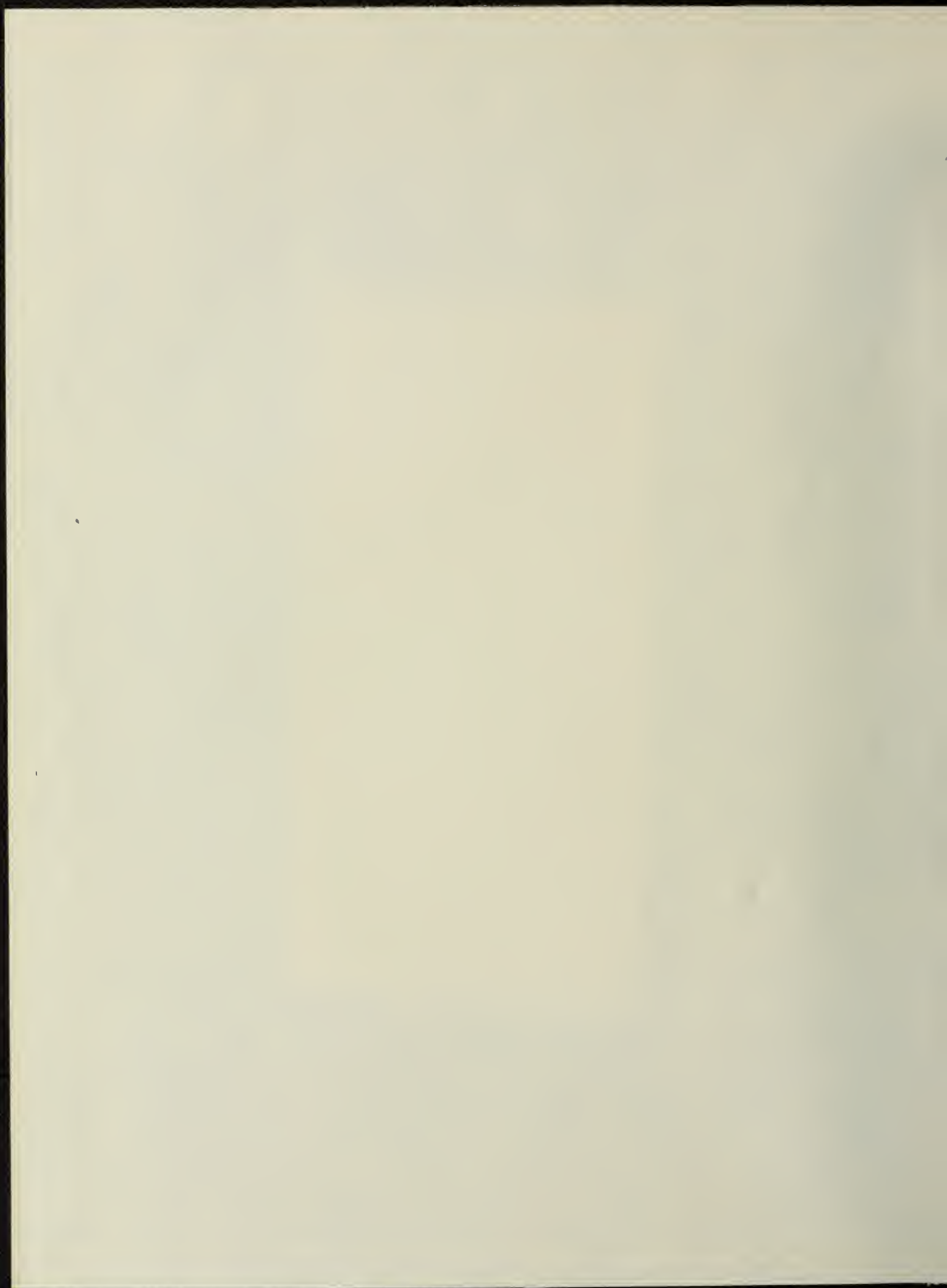
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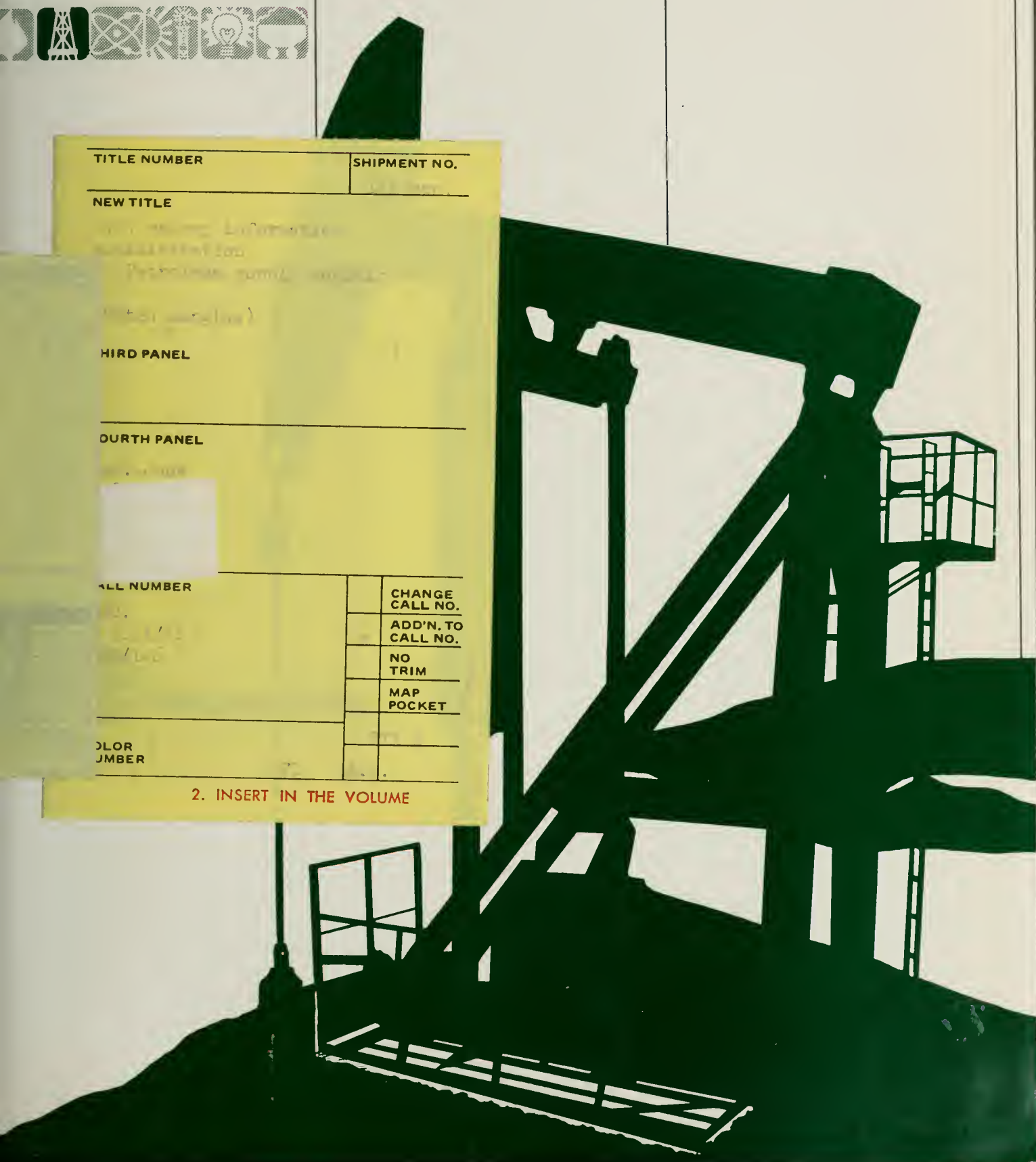
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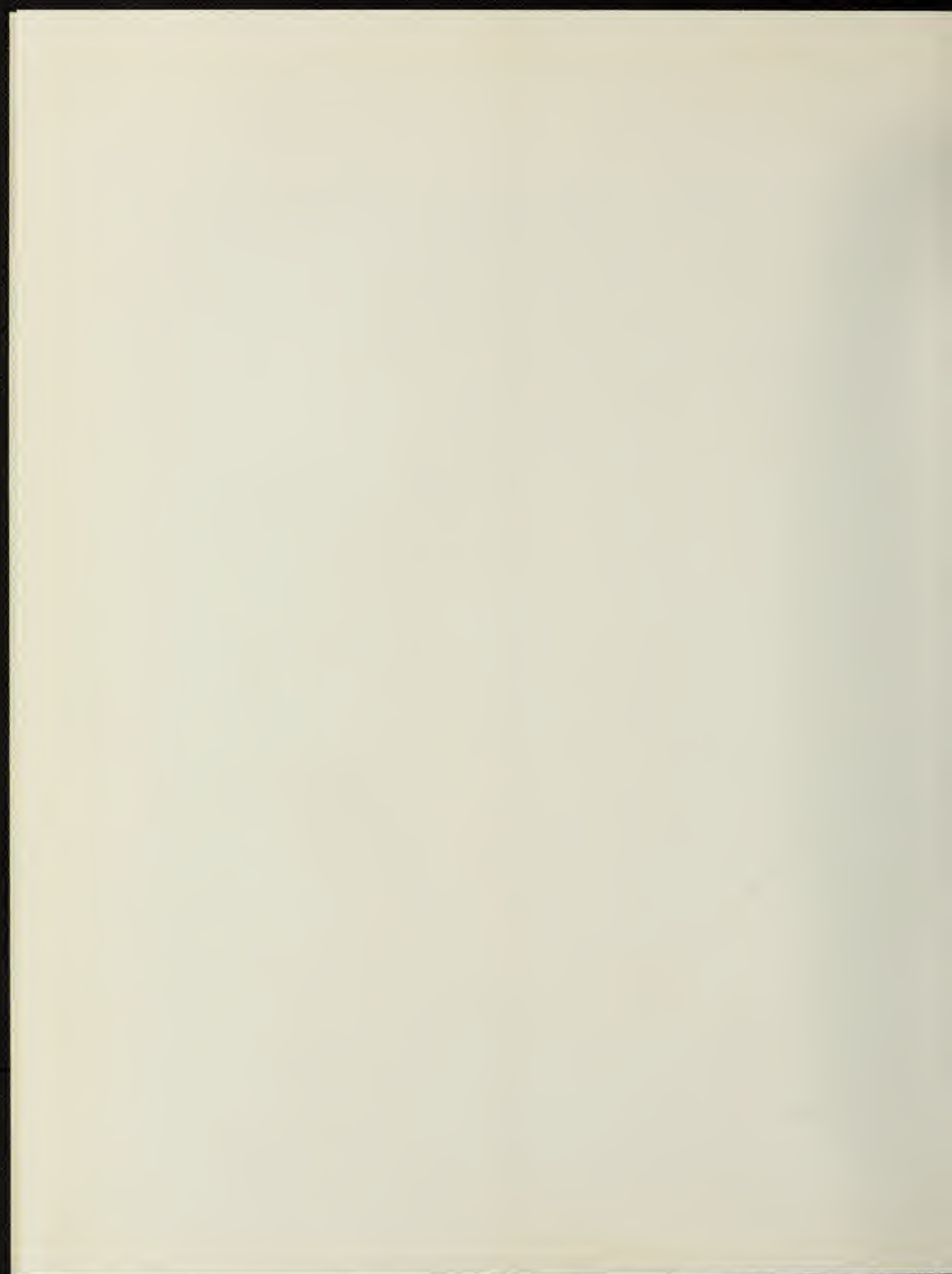
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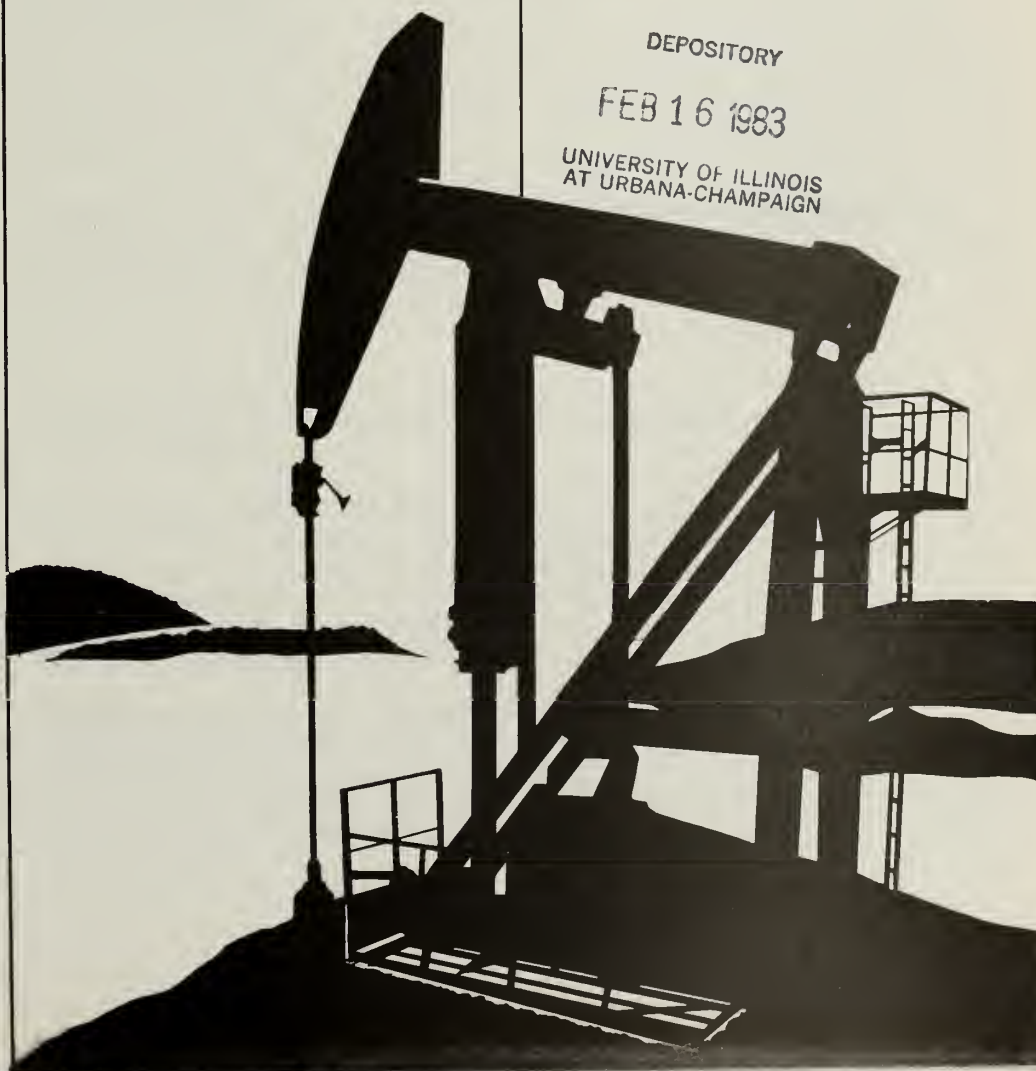
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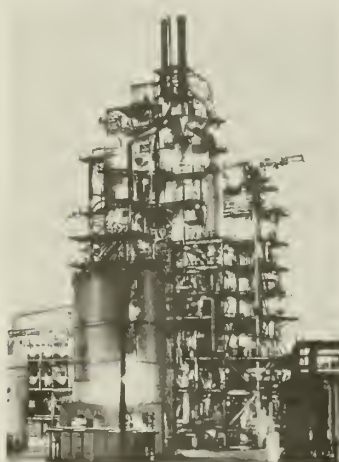
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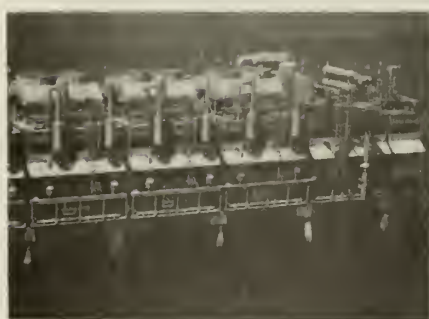


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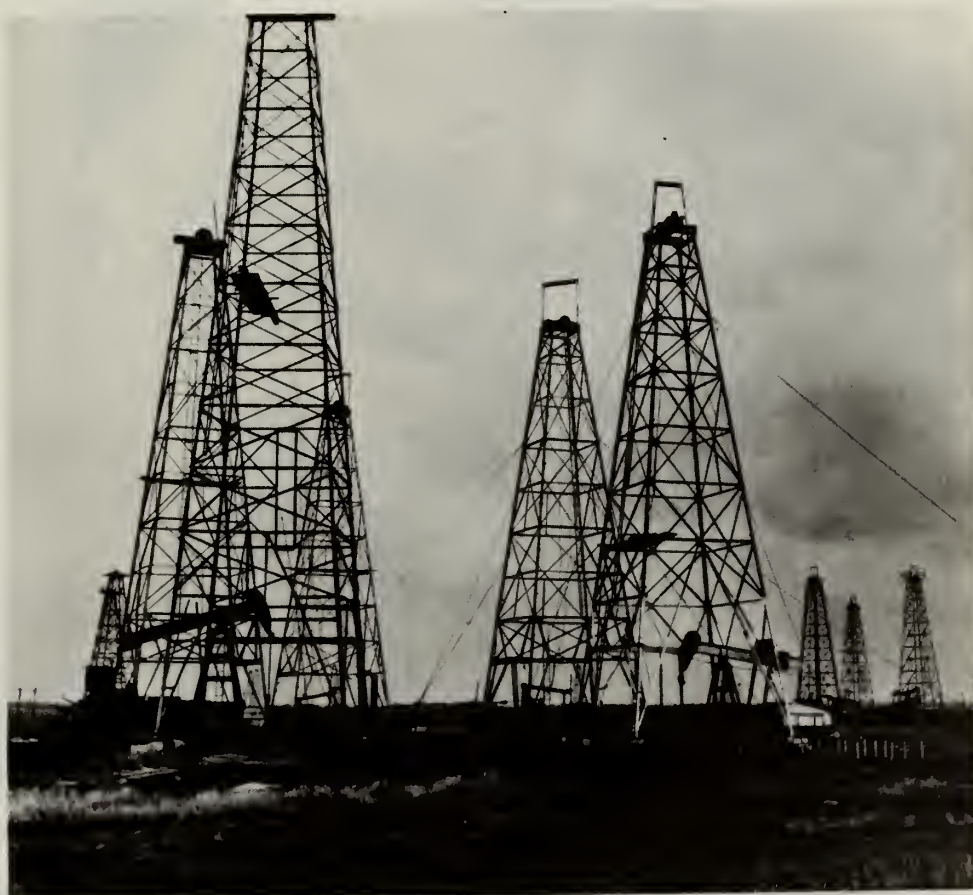
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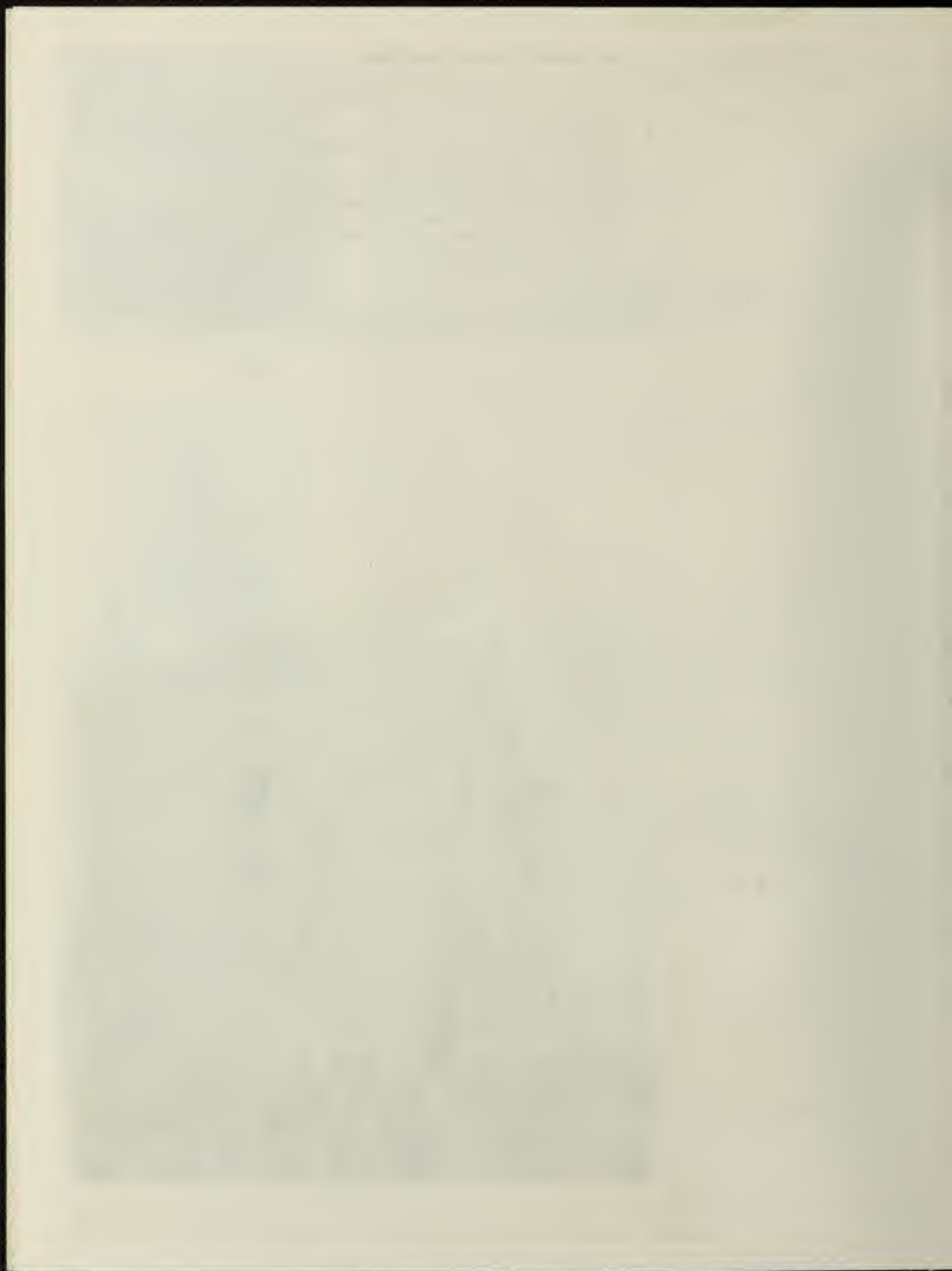
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Petroleum Focus





Petroleum Supply Summary

Average Volume for Period (Million Barrels Per Day)	December			Cumulative January Through December		
	1982	1981	% Change	1982	1981	% Change
Total Product Supplied	14.9	16.6	-10.3	15.2	16.1	-5.3
Motor Gasoline	6.2	6.7	-6.6	6.5	6.6	-1.2
Distillate Fuel Oil	2.8	3.2	-13.1	2.7	2.8	-5.7
Residual Fuel Oil	1.3	2.2	-42.4	1.7	2.1	-20.1
Crude Inputs to Refineries	11.8	12.3	-4.7	11.8	12.5	-5.4
Crude Oil and Natural Gas Liquids Production	10.3	10.2	1.2	10.2	10.2	0.4
Net Imports ¹	3.6	5.2	-30.8	4.2	5.4	-21.9
Net Crude Oil Imports ²	2.6	3.8	-30.8	3.1	3.9	-21.9
SPR Imports	0.1	0.2	-12.1	0.2	0.3	-34.8
Net Product Imports	0.8	1.2	-33.0	1.0	1.2	-19.4
Crude Oil Stock Withdrawal ³	(s)	0.08	—	0.03	0.05	—
Product Stock Withdrawal	0.20	0.75	—	0.24	0.13	—
Stocks at End of Period (Million Barrels)						
Crude Oil ⁴	354	363	-2.6			
Motor Gasoline ⁴	237	253	-6.4			
Distillate Fuel Oil	181	192	-5.6			
Residual Fuel Oil	68	78	-12.7			
Total Product	792	890	-11.0			
SPR	293	230	27.4			
Total	1,440	1,484	-3.0			

¹Gross imports of crude oil (including Strategic Petroleum Reserve) and petroleum products less exports of crude oil and petroleum products.

²Excluding Strategic Petroleum Reserve (SPR).

³Including blending components.

(s) Less than 5,000 barrels per day

Note: Percent changes are based on unrounded values. December 1982 data are estimates based on weekly data, except for export estimates which are November 1982 monthly values.

Source: Energy Information Administration, *Petroleum Supply Monthly*, January 1983.

U.S. Petroleum Developments: 1982

Petroleum developments in 1982 were characterized by continued declines in many areas:

- Imports and petroleum consumption continued to decline.
- Stocks of products declined sharply and remained low.
- Crude oil prices as well as retail and wholesale refined product prices fell.
- Refinery production and capacity declined.
- Drilling activity decreased substantially from the record peak in 1981.

Crude oil production and exports did not follow the downward trend. Crude oil production was virtually unchanged from the 1981 rate; while exports increased for the seventh consecutive year.

Petroleum Consumption

During 1982, petroleum consumption in the United States (measured as products supplied for domestic use) declined for the fourth consecutive year (see Figure 1). The average consumption of 15.2 million barrels per day, was about 900 thousand barrels per day lower than the 1981 average and was the lowest annual average for petroleum consumption since 1971. Even though prices fell, especially during the first quarter of 1982, consumption continued to drop as the economy weakened. Continued conservation efforts and fuel switching, induced by past sharp petroleum product price increases, also contributed to the decline, even though petroleum prices were generally lower during 1982 than during 1981.

Despite the continuing decline in consumption, petroleum remained the principal U.S. energy source. About 43 percent of the energy consumed in the United States during 1982 came from petroleum (see Figure 2). This percentage, which reached a peak at 49 percent in 1977, continued to drop as high petrole-

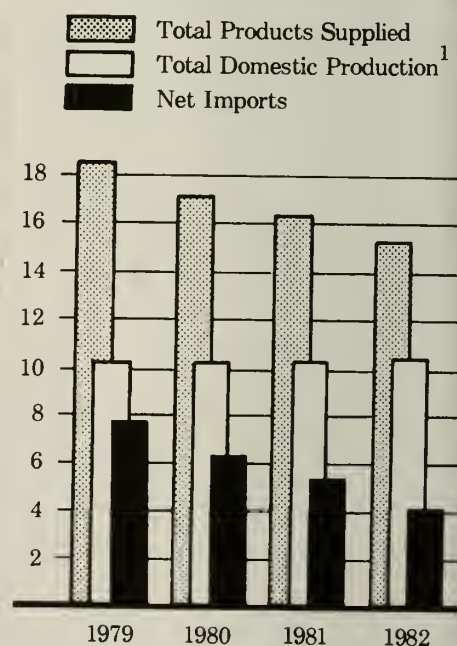
um prices and the relatively lower cost of using fuels such as natural gas and coal encouraged conservation by consumers and conversion to other fuels.¹

Motor gasoline supplied for domestic use averaged 6.5 million barrels per day during 1982, 12 percent below the average for 1978, the peak year of gasoline consumption and about 1 percent below that of 1981.² This decline occurred despite the fact that gasoline prices were lower throughout most of 1982 than those in 1981. Residual fuel oil and distillate fuel oil also showed large declines in consumption, down 20 percent and 6 percent, respectively, from their 1981 levels. Consumption of these and other major refined products generally de-

¹Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(82/12) (Washington, D.C., December 1982), p. 6.

²Energy Information Administration, *Petroleum Supply Monthly*, DOE/EIA-0109 (83/01) (Washington, D.C.: January 1983) p. 26.

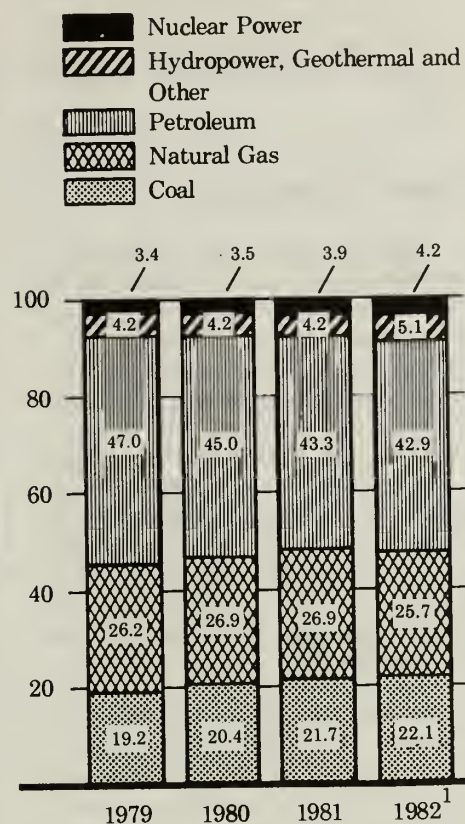
Figure 1. Petroleum Summary
(Million Barrels per Day)



¹Includes crude oil and natural gas plant liquid production.

Source: *Petroleum Supply Monthly*

Figure 2. Consumption of Energy by Type (Percent)



¹ Data for 1982 are for the months of January through September.

Source: Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035-(81/12), Washington, D.C., December 1982

creased by an average of 5 percent during the year (see Figure 3).³

Distillate fuel oil consumption, which averaged 2.7 million barrels per day in 1982, was about 6 percent below the average for 1981.⁴ The October 1982 price for home heating oil was approximately \$1.20 per gallon compared with the average price of approximately \$1.19 per gallon in October 1981.⁵

After decreasing nearly 17 percent between 1980 and 1981, residual fuel oil consumption continued to decline during 1982, averaging 1.7 million barrels per day, about 20 percent below the 1981 average.⁶ The average retail price per barrel, excluding tax, of residual fuel oil in the first 10 months of 1982 was \$29.16, more than 10 percent below the average price for 1981.⁷ That the decline

in consumption came at a time when prices were falling indicates the impact of the sluggish economy on industrial users, the second largest consumers of residual fuel oil (Electric utilities are the largest consumers).

Fuel-switching by electric utilities and industrial plants also contributed to the decline in residual fuel oil consumption. During 1981, the costs of generating electricity were significantly higher for utilities burning residual fuel oil than

³*Petroleum Supply Monthly*, (January 1983), pp. 27, 32, and 36.

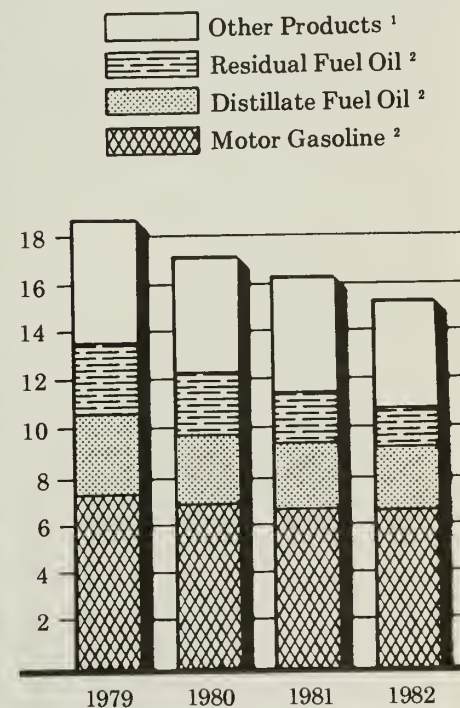
⁴*Petroleum Supply Monthly* (January 1983), p. 27.

⁵Energy Information Administration, *Monthly Petroleum Product Price Report*, DOE/EIA-0032 (82/10) (Washington, D.C., October 1982) Table 8.

⁶*Petroleum Supply Monthly* (January 1983) p. 32.

⁷*Monthly Petroleum Product Price Report* (October 1982) Table 3.

Figure 3. Petroleum Products Supplied for Domestic Use (Million Barrels per Day)



¹Other petroleum products include liquefied gases, jet fuels, and petrochemical feedstocks.

²Reflects recast 1979 and 1980 figures. See Explanatory Note 4.

Source: *Petroleum Supply Monthly*

for those burning coal and natural gas. The cost of burning residual fuel oil at steam electric utilities was \$5.29 per million British thermal units (Btu's), approximately three and a half times the cost of burning coal (\$1.53 per million Btu's) and nearly twice the cost of burning natural gas (\$2.83 per million Btu's).⁸

Refinery Operations

The total operable distillation capacity⁹ of petroleum refineries in the United States decreased by about 1.1 million barrels per day during 1982 as 52 refineries shut down. Refinery capacity had previously decreased by 451 thousand barrels per day as a result of refinery closings during 1981.¹⁰ The continued refinery closings are the result of a combination of factors including the decreased demand for petroleum products, market shifts, increased transportation costs, consolidation of refinery operations, and decontrol of crude oil prices.

U.S. refineries operated at about 70 percent of capacity in 1982, partly as a result of the same factors which caused so many refineries to close. Crude oil inputs to refineries averaged about 11.8 million barrels per day during the year, about 5 percent below the 1981 average.¹¹

Petroleum Stocks

Total petroleum stocks (excluding Strategic Petroleum Reserve stocks) decreased about 107 million barrels during 1982. About 98 million barrels of the decrease were in inventories of refined products.¹² The drawdowns reflect refiners' decisions to maintain lower inventories.

At the end of 1982, stock levels of most major products were well below the levels at the end of 1981. Distillate fuel oil inventories, at 181 million barrels, were 6 percent below the level at the end of 1981; residual fuel oil inventories, at 68 million barrels, were nearly 13 percent below the level at the end of 1981. Inventories of motor gasoline stood at 237 million barrels, about 6 percent below the level at the end of 1981.¹³ Even though inventories were at substantially lower levels at the end of 1982, supplies of petroleum products, and of

fuel oils in particular, were expected to be adequate to meet the anticipated lower demand for the winter of 1982-1983.

Imports

The downward trend in imports continued during 1982 as net imports (gross imports minus exports) of crude oil and petroleum products sank to an average of 4.2 million barrels per day, 22 percent below the average for 1981. During 1981, net imports averaged 5.4 million barrels per day, 15 percent below the level during 1980. Of the 1982 net import amounts, net crude oil imports averaged 3.2 million barrels per day, down 23 percent from 1981. Net imports of petroleum products averaged 1.0 million barrels per day, 19 percent below the annual average for 1981. The largest decline among petroleum product imports was in distillate fuel oil imports which were down 45 percent from 1981.¹⁴

Exports

Exports of petroleum products were about 200 thousand barrels per day, 57 percent higher during 1982 than during 1981. The growth in exports is attributable mainly to the relaxation of export restrictions. The increase was most noticeable in the residual fuel oil exports, which jumped by 94 thousand barrels per day and in exports of distillate fuel oil, which increased by 60 thousand barrels per day.¹⁵ For

⁸Energy Information Administration, *Cost and Quality of Fuels for Electric Utility Plants*, DOE/EIA-0191(81) (Washington, D.C., 1982) pp. 10, 14, 17.

⁹*Petroleum Supply Monthly*, (January 1983), p. G-5.

¹⁰*Petroleum Supply Monthly*, (June 1982), p. 8.

¹¹*Petroleum Supply Monthly* (January 1983) p. 23.

¹²*Petroleum Supply Monthly* (January 1983) p. 18.

¹³*Petroleum Supply Monthly*, (January 1983) pp. 26, 27, and 32.

¹⁴*Petroleum Supply Monthly*, (January 1983) pp. 19, 22, and 27.

¹⁵*Monthly Energy Review* (December 1982) pp. 31, 40, and 42.

several months during the year, the United States was a net exporter of distillate fuel oil. In those months, the volume of distillate fuel oil exported exceeded the volume imported.

Crude Oil Production

Domestic crude oil production averaged approximately 8.6 million barrels per day for the fourth consecutive year. However, because of the declines in crude oil prices and demand, drilling activity, which reached an all-time high in 1981, decreased substantially during 1982.

The average number of drilling rigs operating declined from 4,520 in December 1981 to 2,696 in December 1982, a 40 percent decline.¹⁶ During 1982, 85,855 new wells were completed. This was 7,317 wells above the number completed during 1981.¹⁷

The number of seismic crews operating peaked at 744 in September 1981 and began a decline which continued through 1982. By December 1982, the number had reached 477, the lowest level since March 1980.¹⁸

Prices

Most petroleum prices declined steadily through the first 4 months of the year including: average domestic wellhead

prices of crude oil, the composite refiner acquisition costs of domestic and foreign crude oil, the average wholesale and retail prices of diesel fuel and heating oil, the average wholesale prices of residual fuel oil and the average retail price for motor gasoline. By September the average domestic wellhead price of crude oil was \$28.08 per barrel, \$3.05 below that of one year earlier,¹⁹ and the average composite refiner acquisition cost in October was about 7 percent below the cost at the end of 1981. The average retail price of motor gasoline, at \$1.27 per gallon in November, was about 6 percent below the average price in November 1981.²⁰

The average price of residential heating oil, at \$1.20 per gallon, was about 1 percent higher than in October 1981.²¹

¹⁶Hughes Tool Company, *Rotary Rigs Running—By State* (December 1981-December 1982).

¹⁷American Petroleum Institute, *Report on Drilling Activity in the United States* (January 1981-December 1982).

¹⁸Society of Exploration Geologists, "SEG News Release," (January 1980-December 1982).

¹⁹*Monthly Energy Review* (December 1982) p. 80.

²⁰Energy Information Administration, *Weekly Petroleum Status Report*, DOE/EIA-0208 (83-01) (Washington, D.C.: January 21, 1983), p. 17.

²¹*Weekly Petroleum Status Report*, (January 21, 1983), p. 17.

Trends in Petroleum Products Consumption, 1971-1982

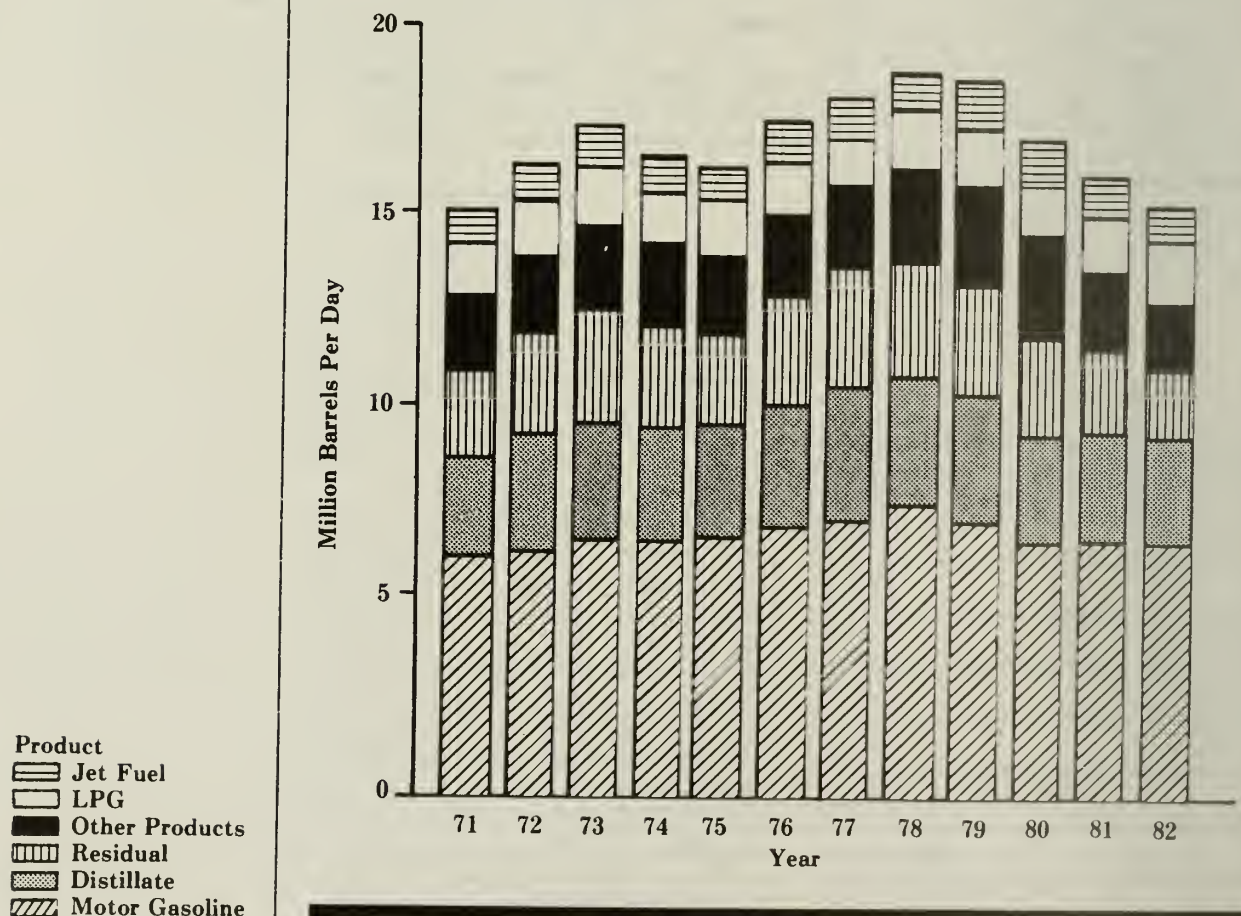
During 1982, consumption of petroleum products (measured as products supplied for domestic use) continued to decline as it has in each year since 1978. The average 1982 consumption of 15.2 million barrels per day was only slightly above the average during 1971.¹ Petroleum products consumption has varied since 1971 in reaction to crude oil and petroleum product price changes, to product availability, and to economic conditions. Petroleum product consumption increased from 1971 to 1973 as supplies were plentiful and prices were relatively low. Then, as a result of the Arab oil embargo and collective action of the Organization of Petroleum Exporting Countries (OPEC), prices of imported crude oil and petroleum products increased rapidly. These sudden price changes contributed significantly to an economic recession which ran from November 1973 through March 1975.

The recession, combined with higher prices, in turn contributed to decreases in petroleum consumption in 1974 and 1975.

Because of increased imports and stabilized prices, petroleum supplies (notably supplies of gasoline) were abundant in 1976, and average annual consumption of petroleum products jumped more than 15 percent from 1975 to 1978, when 18.8 million barrels per day were consumed, the largest amount ever. The record consumption in 1978 was again followed by shortages in 1979 and increasing world crude oil prices. The average refiner acquisition cost of imported crude oil jumped from nearly \$15

¹Energy Information Administration, *Petroleum Supply Monthly*, DOE/EIA-0109 (83/01) (Washington, D.C.: January 1983) p. 18.

Figure 4. Consumption of Major Petroleum Products: 1971 to 1982



Data Sources

The consumption data in this article are based on the State Energy Data System (SEDS), an EIA system that generates annual estimates of energy consumption by State and major end-use sectors. In the SEDS, State consumption of petroleum products is calculated by disaggregating national values using State sales or deliveries data. Complete documentation of the SEDS data sources and methodology is found in the EIA publication, *State Energy Data Report, 1960 through 1980*. This SEDS report is the source of consumption data presented in this article for the years 1971 through 1980, except where otherwise noted. The end-use sector consumption estimates for 1981 follow the SEDS methodology but use 1981 source data. Petroleum products consumption for 1982 is drawn from the products supplied information in the *Petroleum Supply Monthly*.

per barrel in December 1978 to approximately \$29 per barrel in December 1979 forcing up retail prices of petroleum products.² Petroleum consumers reacted to these dramatic price increases by switching to less costly fuels whenever possible and by reducing their consumption through conservation efforts. Since 1980, reduced industrial utilization, caused by the sluggish economy, combined with continued conservation and fuel switching has contributed to further declines in consumption of petroleum products.

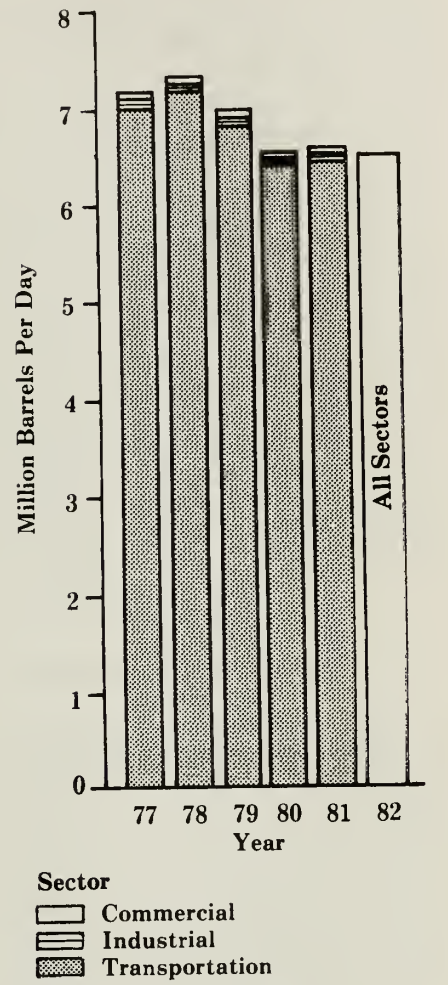
Trends in Consumption of Major Products

Since 1971, average annual consumption of motor gasoline, distillate fuel oil, and residual fuel oil combined has followed a pattern similar to that of total consumption (see Figure 4). Consumption of these products peaked in 1977 or 1978 and then declined. Consumption of residual fuel oil showed the most dramatic change over this period; it showed the greatest percentage increase among the major products and the most drastic decline. Consumption of liquefied petroleum gases (LPG) and of jet fuel, on the other hand, has been more stable during this period, showing no significant trend. Except for consumption of residual fuel oil, which was significantly lower, consumption of all of the major products during 1982 was either above or close to the amount of that product consumed in 1971.

Motor Gasoline

Motor gasoline consumption increased each year between 1971 and 1978 except 1974, the year after the Arab Oil Embargo. During 1978, motor gasoline consumption peaked at an average rate of 7.4 million barrels per day, about 23 percent higher than the 1971 level. Average annual consumption declined to 7.0 million barrels per day in 1979 and to 6.6 million barrels per day in 1980, a rate which continued through 1981 (see Figure 5). Consumption in 1982 averaged 6.5 million barrels per day, more than 12 percent below the peak consumption of 1978. However, because motor gasoline consumption remained relatively constant after 1980 while total petroleum product consumption declined, the motor gasoline portion of total consump-

Figure 5. Consumption of Motor Gasoline by End-Use Sector



tion increased to 43 percent in 1982. During most of the 1970's, motor gasoline's share ranged between 38 and 41 percent of total petroleum consumption.

During 1977, the first year that EIA collected unleaded motor gasoline data, annual consumption of unleaded motor gasoline averaged 2.0 million barrels per day, about 28 percent of all motor gasoline consumed that year. Since 1977, consumption of unleaded motor gasoline consumed that year.³ Since 1977, consumption of unleaded motor gasoline has increased significantly. In

²Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035 (3/80) (Washington, D.C.: March 1980), p. 76.
³*Petroleum Supply Monthly* (January 1983), p. 26.

United States was unleaded. During 1982, unleaded gasoline consumption averaged 3.4 million barrels per day or about 52 percent of total motor gasoline consumption. The increase in consumption of unleaded motor gasoline was due to the increasing number of vehicles requiring unleaded gasoline (almost all of the automobiles currently manufactured for sale) and to the retirement of older cars which use leaded gasoline.

The fluctuations in total motor gasoline consumption are attributable in part to gasoline price increases, improved automobile efficiency, and changes in vehicle use patterns. Following the 1973 Arab Oil Embargo, when motor gasoline supplies became tight and gasoline prices increased, consumption declined slightly. By 1976, after consumers adjusted to these price increases and the supply of motor gasoline was again adequate, consumption rose as vehicle miles traveled increased. Then, in 1979, increases in the cost of imported crude oil caused gasoline prices to rise dramatically. By December 1981, the average price per gallon for all grades of gasoline was \$1.35,⁴ almost double the December 1978 price of \$0.69.⁵ Once more gasoline consumption fell as increased prices caused consumers to limit use of their vehicles. Continued improvements in fuel economy, which increased 15 percent from 1975 to 1981, also contributed to the reduction in consumption.

Distillate Fuel Oil

The pattern of distillate fuel oil consumption during the 1971-1982 period followed that of total petroleum more clearly than consumption of any other major product. During 1973, annual consumption of distillate fuel oil averaged 3.1 million barrels per day, 6 percent above the 1971 average. After decreasing slightly in 1974 and 1975, it climbed to 3.4 million barrels per day in 1978, 29 percent above the average for 1971 and 11 percent above the average for 1973. Since 1978, consumption of distillate fuel oil has decreased steadily (see Figure 6). During 1982, it averaged 2.7 million barrels per day, about the same as the 1971 average and more than 22 percent below the average for 1978 when distillate fuel oil consumption peaked.⁶

Increasing prices and conservation measures have contributed to declining use of distillate fuel oil by residences

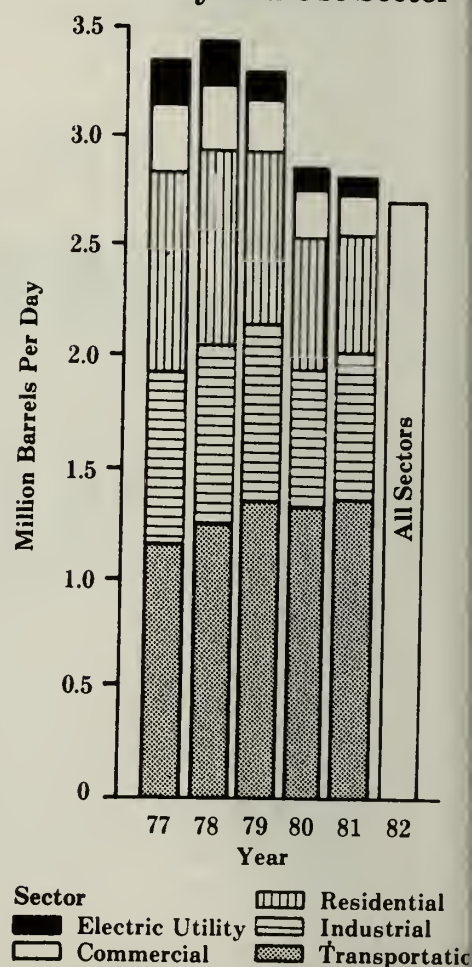
and commercial establishments (see Figures 6, 10, and 11) as their primary heating fuel. Industrial consumption has declined since 1979 because of stagnant economic conditions (see Figures 6 and 13). While these decreases were occurring, the importance of distillate fuel oil in the transportation sector increased (see Figures 6 and 14). The use of diesel fuel in on-highway vehicles (trucks, buses, and autos), as a low-sulfur bunker fuel for intercoastal shipping, and as railroad fuel has offset the declining heating and industrial market for distillate fuel oils in recent years. As a result, the distillate percentage of total consumption has remained relatively constant at about 18 percent, even though its importance in different sectors of the economy has changed.

⁴Monthly Energy Review (March 1982), p. 80.

⁵Monthly Energy Review (March 1980), p. 79.

⁶Petroleum Supply Monthly (January 1983), p. 27.

Figure 6. Consumption of Distillate Fuel Oil by End-Use Sector



Residual Fuel Oil

The trend in residual fuel oil consumption differs somewhat from that of the other major products. Annual consumption of residual fuel oil peaked in 1977 at 3.1 million barrels per day. In 1977, consumption of residual fuel oil was almost 34 percent higher than in 1971, the largest percentage gain among the major products. At the same time, its share of total petroleum product consumption was also larger—15 percent in 1971 and almost 17 percent in 1977. Since 1977, average annual consumption of residual fuel oil has declined. In 1982, consumption of residual fuel oil averaged 1.7 million barrels per day, 24 percent below the 1971 average and 46 percent below the average for 1977. The share of total petroleum consumption represented by

residual fuel oil consumption was also lower in 1982 (11 percent) than in 1971 (15 percent).

Throughout most of this 12-year period, the principal consumers of residual fuel oil were electric utilities and industrial plants. Consumption of residual fuel oil by electric utilities has declined since 1977 mainly because its price has increased in relation to that of coal and natural gas. The decreased utilization of manufacturing plants stemming from the stagnant condition of the economy has resulted in decreased industrial use of residual fuel oil (see Figure 7). The portion of residual fuel oil consumed in the transportation sector, however, expanded as consumption at utilities and in industry declined. Transportation use represented only 13 percent of total residual fuel oil consumption in 1977, but by 1981 it accounted for 26 percent of the total, becoming the second largest end-use of residual fuel oil.

Sector
 Electric Utility
 Commercial
 Residential
 Industrial
 Transportation

Figure 7. Consumption of Residual Fuel Oil by End-Use Sector

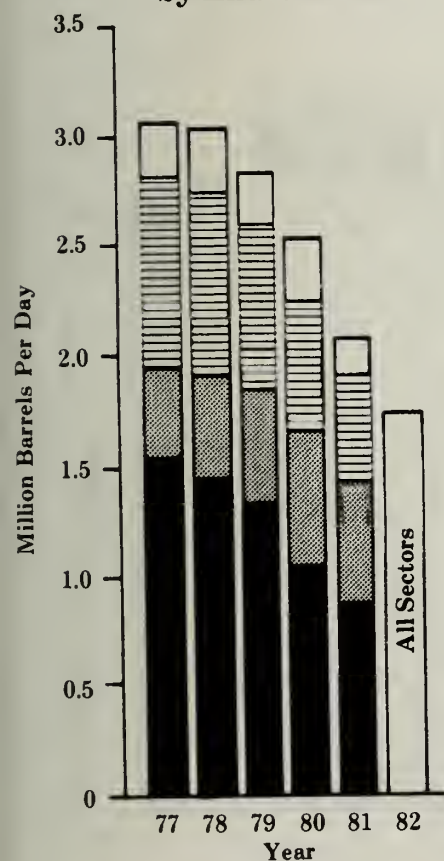
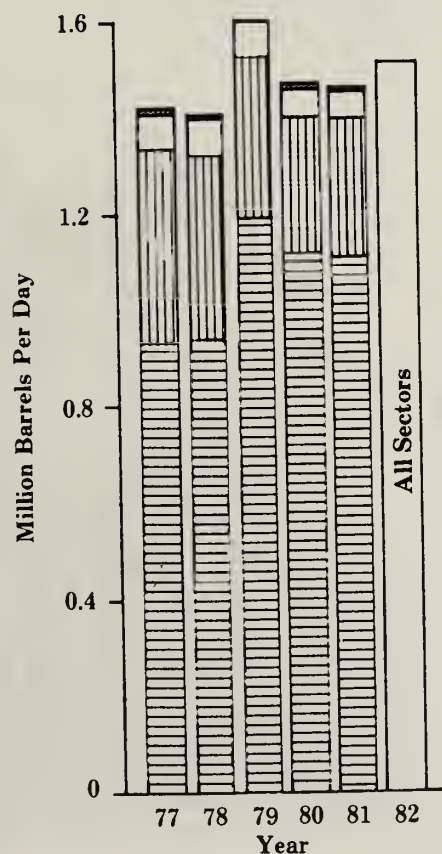


Figure 8. Consumption of Liquefied Petroleum Gases by End-Use Sector



Liquefied Petroleum Gases

Average consumption of liquefied petroleum gases (LPG) during 1982 was slightly more than 1.5 million barrels per day, an average that was higher than in any year except 1979 when LPG consumption reached almost 1.6 million barrels per day. Except for the drop in the recession year of 1975, consumption of LPG was relatively stable at slightly more than 1.4 million barrels per day from 1972 through 1978. During 1980 and 1981, average LPG consumption was slightly less than 1.5 million barrels per day.

Increased consumption of LPG in the industrial sector has more than offset declines in usage by the other sectors since 1978. Industrial use, primarily as raw materials in chemical manufactures, accounted for 76 percent of total LPG consumption in 1981 as opposed to 66 percent in 1977 (see Figure 8).

Jet Fuels

Consumption of jet fuels remained relatively constant between 1971 and 1982, varying between slightly less than 1.0 million barrels per day in 1974 and almost 1.1 million barrels per day in 1979. In 1981, the level fell to 1.0 million bar-

rels per day and remained at that level through 1982. The recent drop in consumption probably reflects reductions in air traffic brought on both by the controllers strike of 1981 and the depressed economic conditions during the past 2 years.

End-Use Sector Consumption

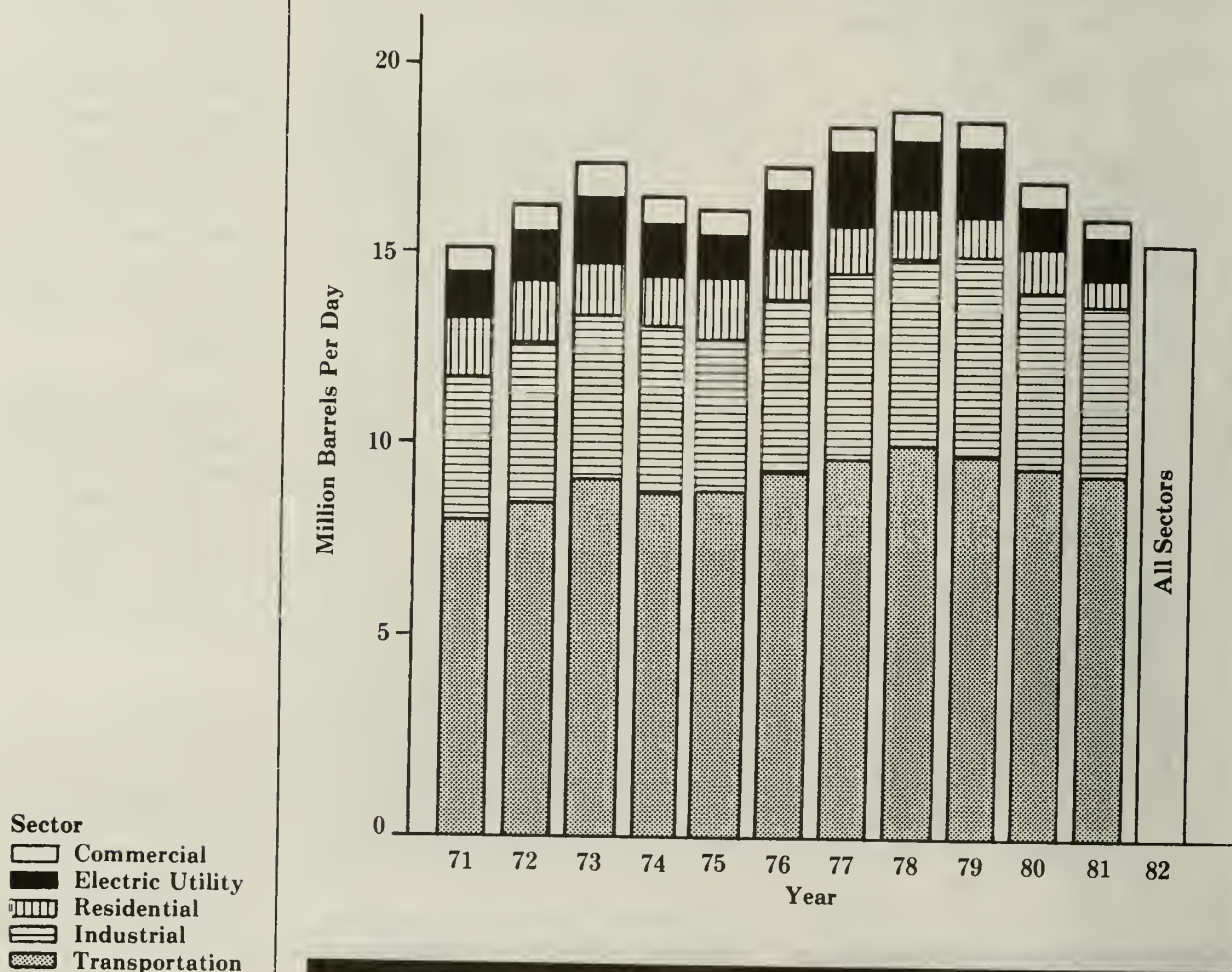
During the period from 1971 through 1981, patterns of consumption of major petroleum products changed. Two periods of major price increases were followed by reduced petroleum usage in all sectors of the economy, because of consumers' conservation efforts and their switching to other, less costly fuels. The transportation and industrial sectors consumed more petroleum in 1981 than in 1971, while the other sectors consumed less (see Figure 9).

Residential Sector

After remaining relatively stable in the early 1970's at an annual average of about 1.5 million barrels per day, consumption of petroleum products in the residential sector declined in recent years (see Figure 10). By 1981, residential use averaged only 0.9 million barrels per day, 40 percent below the average residential consumption in 1971.

The portion of total petroleum product consumption accounted for by the residential sector also declined during the period. In 1971, it was almost 10 percent of the total; in 1977, it was 7 percent; and, in 1981, it was only 6 percent. After 1978, when consumption of all petroleum products began to decline, residential use declined at an even faster rate. By 1981, residential consumption had dropped 28 percent compared with a 1 percent drop in total consumption.

Figure 9. Consumption of Petroleum Products by End-Use Sector: 1971 to 1981

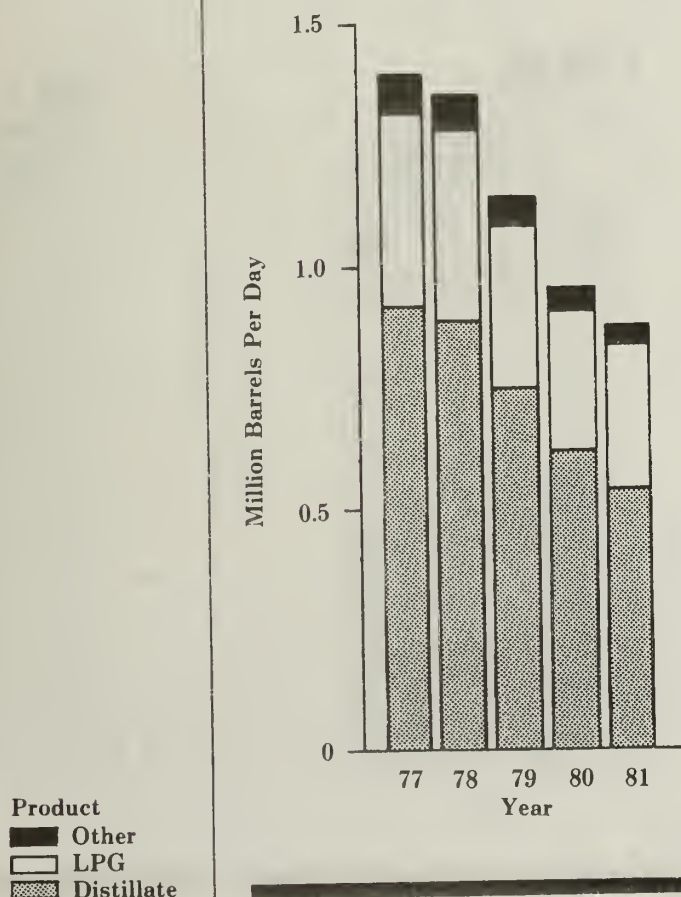


The decline in residential consumption of petroleum products can be traced primarily to fuel switching and conservation brought on by increases in the cost of fuel oil. The average retail price per gallon for residential heating oil was \$1.20 in 1981, almost triple the 1976 price of 40.6 cents.⁷ As the 1980 EIA Residential Energy Consumption Survey showed, many households have switched from heating oil to natural gas and wood.⁸

Commercial Sector

The commercial sector uses about half as much petroleum as the residential sector. Between 1971 and 1981, commercial consumption fell from 0.7 million barrels per day in 1973, to a recent low of 0.5 million barrels per day in 1981. Commercial consumption in 1981 was 3 percent of total consumption compared with 5 percent in 1971.

Figure 10. Consumption of Major Petroleum Products in the Residential Sector



As with residential consumption, commercial use of petroleum products also declined as prices rose. Distillate and residual fuel oils are the principal petroleum products consumed in apartment buildings, business offices, and institutions. As the prices of petroleum products increased, commercial consumers began to switch to other fuels and to utilize conservation means to reduce expenses. In addition, economic conditions since 1981 have forced many commercial establishments to close.

Electric Utility Sector

Like petroleum consumption in the residential and commercial sectors, consumption in the electric utility sector also declined. Electric utility consumption of petroleum products peaked in 1977 at 1.7 million barrels per day, 60 percent higher than the 1.1 million barrels per day consumed in 1971 and 45 percent above the 1981 average annual consumption of 1.0 million barrels per day.⁹ Since 1977, the electric utility portion of total petroleum product consumption has declined as well, from about 11 percent in 1977 to 7 percent in 1981 (see Figure 12).

Price has been a primary factor in the decline in petroleum consumption at electric utilities. The significant increase in the cost of fuel oil relative to the cost of other fuels has encouraged switching to fuels other than petroleum. The EIA report, *Cost and Quality of Fuels for Electric Utility Plants, 1981 Annual*, shows that, in 1978, the cost (per Btu) of fuel oil to electric utilities was 53 percent higher than natural gas costs and almost twice the cost of coal. In 1981, the price differential had increased, and the price of fuel oil was almost twice that of natural gas and almost three and a half times the price of coal.

⁷Monthly Energy Review (March 1982), p. 82.

⁸Energy Information Administration, *Residential Energy Consumption Survey, Consumption and Expenditures April 1980 through March 1981*, DOE/EIA-0321/1 (Washington, D.C.: September 1982), pp. 3-9.

⁹Monthly Energy Review (November 1982), p. 23.

Definitions of Major End-use Consuming Sectors

The State Energy Data System assigns energy consumption to five major end-use sectors according to the following guidelines:

- **Residential Sector:** Energy consumed by private household establishments primarily for space heating, water heating, air conditioning, cooking, and clothes drying.

- **Commercial Sector:** Energy consumed by non-manufacturing establishments. Included are motels, restaurants, wholesale businesses, retail stores, laundries, and other service enterprises, as well as health, social, and educational institutions, and

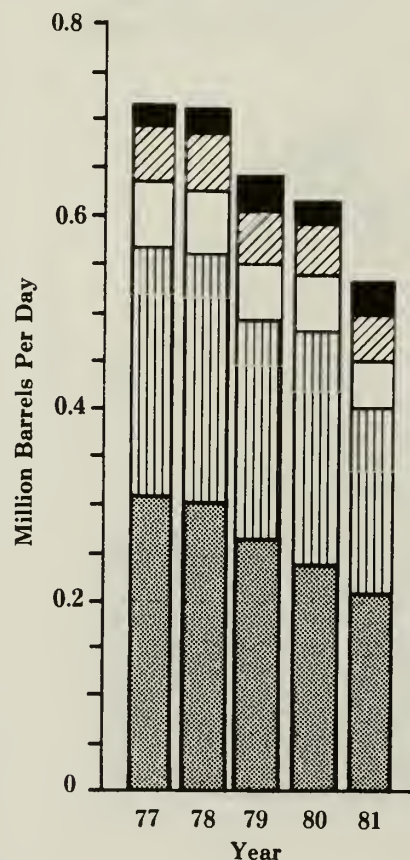
energy consumed by Federal, State and local government.

- **Industrial Sector:** Energy consumed by manufacturing, construction, mining, agriculture, and forestry establishments.

- **Transportation Sector:** Energy consumed to move people and commodities in both the public and private sectors. Included are military, railroad, vessel bunkering, and marine uses, as well as the pipeline transmission of natural gas.

- **Electric Utility Sector:** Energy consumed by privately—and publicly—owned establishments which generate electricity primarily for resale.

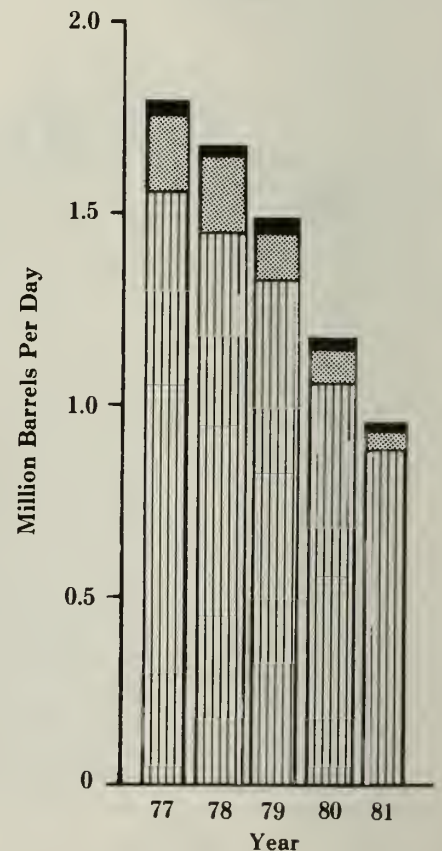
Figure 11. Consumption of Major Petroleum Products in the Commercial Sector



Product

- Other
- Motor Gasoline
- LPG
- Residual
- Distillate

Figure 12. Consumption of Petroleum Products in the Electric Utility Sector



Industrial Sector

Industrial use of petroleum products fluctuated with the economy between 1971 and 1981, but its share of total petroleum consumption changed very little (see Figures 9 and 13). During 1971, industrial consumption averaged 3.9 million barrels per day and accounted for about 25 percent of total consumption. Industrial consumption then climbed to 4.5 million barrels per day in 1973, before declining during the 1974-1975 recession. From 1976 through 1979, consumption again increased, as industrial output increased. It peaked at 5.1 million barrels per day in 1979, 33 percent above the 1971 average. Industrial consumption was lower in 1980 and again in 1981 as economic conditions deteriorated. The 1981 average of 4.1 million barrels per day was 20 percent below 1979 levels but 9 percent higher than in 1971. Industrial consumption in 1981 accounted for 26 per-

cent of total petroleum product consumption.

Transportation Sector

More petroleum is consumed in the transportation sector than in any other sector of the economy. It was the only economic sector in which a greater volume was consumed in 1981 than in 1971. Its share of total petroleum consumption also increased over the same period. Consumption for transportation uses averaged 9.5 million barrels per day in 1981 compared with 8.1 million barrels per day in 1971. The 1981 average, however, was 6.5 percent below the record 10.1 million barrels per day consumed in 1978. As a portion of total consumption, the transportation sector accounted for 59 percent in 1981 compared with portions ranging between 52 and 55 percent in the 1970's. Transportation is expected to remain the principal consuming sector for petroleum products throughout the 1980's.

Figure 13. Consumption of Major Petroleum Products in the Industrial Sector

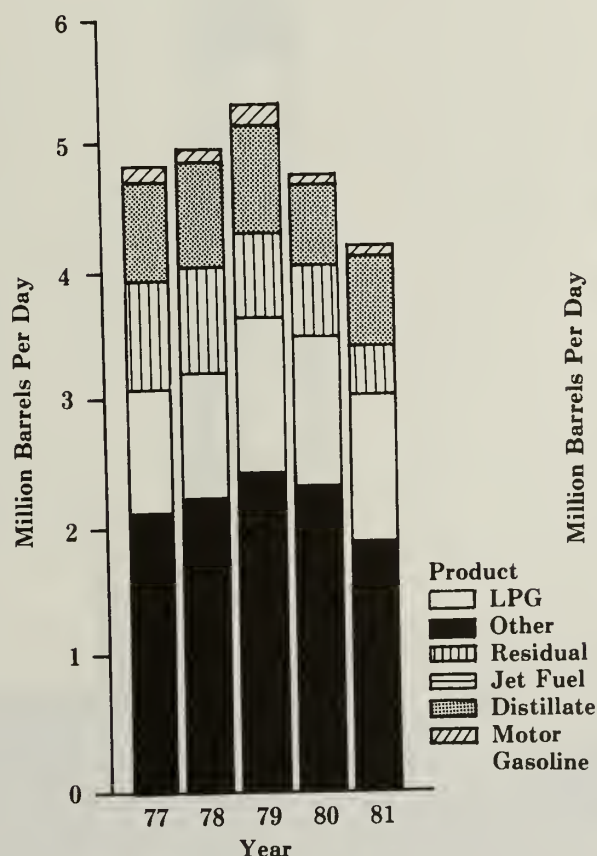
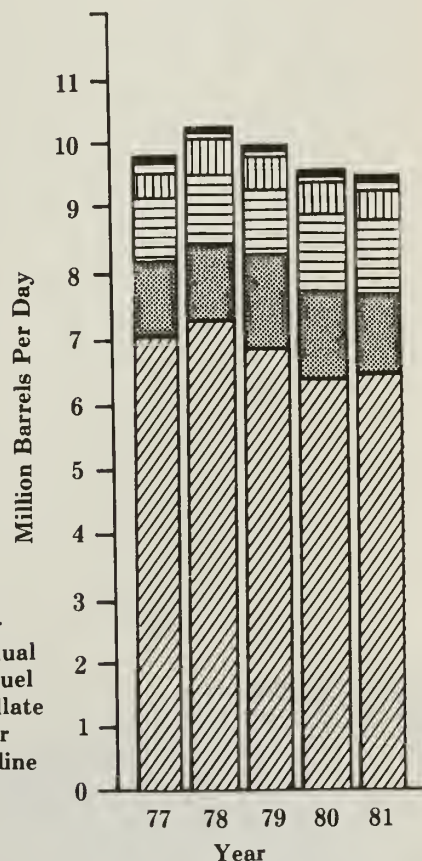


Figure 14. Consumption of Major Petroleum Products in the Transportation Sector





Summary Statistics



Crude Oil¹ and Petroleum Products Overview

		Field Production			Stock Withdrawal ²			Ending Stocks ³
		Total Domestic ⁴	Crude Oil	Natural Gas Plant Production	Crude Oil ⁵	Petroleum Products	Petroleum Products Supplied	Crude Oil ⁵ and Petroleum Products
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	10,975	9,208	1,738	11	-146	17,308	1,008
1974	AVERAGE	10,498	8,774	1,688	-62	-117	16,653	1,074
1975	AVERAGE	10,045	8,375	1,633	-17	-145	16,322	1,133
1976	AVERAGE	9,774	8,132	1,603	-39	96	17,461	1,112
1977	AVERAGE	9,913	8,245	1,618	-170	-378	18,431	1,312
1978	AVERAGE	10,328	8,707	1,567	-78	172	18,847	1,278
1979	AVERAGE	10,179	8,552	1,584	-148	-25	18,513	1,341
1980	AVERAGE	10,214	8,597	1,573	-98	-42	17,056	1,392
1981	January	10,231	8,540	1,652	50	1,159	18,430	1,388
	February	10,294	8,604	1,653	-278	250	16,989	1,389
	March	10,272	8,613	1,624	-632	224	15,907	1,401
	April	10,195	8,557	1,599	-595	148	15,350	1,415
	May	10,160	8,501	1,593	-391	-374	15,353	1,438
	June	10,287	8,629	1,594	-135	406	16,095	1,430
	July	10,098	8,500	1,548	-360	91	15,682	1,439
	August	10,243	8,583	1,614	397	-999	15,263	1,457
	September	10,281	8,604	1,612	-285	-341	15,655	1,476
	October	10,225	8,563	1,598	-760	477	15,822	1,485
	November	10,269	8,586	1,630	-325	-233	15,593	1,501
	December	10,220	8,585	1,590	-170	745	16,596	1,484
	AVERAGE	10,230	8,572	1,609	-290	130	16,058	
1982	January	10,257	8,669	1,548	-236	1,129	15,890	1,461
	February	10,261	8,690	1,524	-216	1,268	15,941	1,431
	March	10,212	8,597	1,570	-65	1,049	15,560	1,401
	April	10,296	8,652	1,588	107	1,594	16,048	1,350
	May	10,223	8,660	1,520	49	-34	14,845	1,349
	June	10,242	8,681	1,505	86	-515	14,931	1,362
	July	10,228	8,649	1,521	-155	-865	14,771	1,394
	August	10,301	8,701	1,543	-440	4	14,838	1,407
	September	10,306	8,733	1,513	252	-489	14,921	1,415
	October	10,283	8,676	1,540	-564	-55	14,820	1,434
	November*	10,377	8,690	1,634	R -357	R -357	R 15,031	R 1,455
	December**	NA	8,660	NA	-126	200	14,894	1,440
	AVERAGE	NA	8,671	NA	-140	238	15,201	

¹ Includes lease condensate.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Ending stocks for 1973-1980 are totals as of December 31.

⁴ Includes crude oil, natural gas plant production, other hydrocarbons and alcohol.

⁵ Includes stocks located in the Strategic Petroleum Reserve.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 5.1.

** Italics denote preliminary data. See Explanatory Note 2.7.

Note: Annual stock changes for 1975 and 1981 were calculated using expanded survey coverage.

Geographic coverage: The 50 United States and the District of Columbia.

Crude Oil¹ and Petroleum Products Overview (continued)

		Imports ²			Exports ³				
		Total	Crude Oil ⁴	Petroleum Products	Total	Crude Oil	Petroleum Products		Net ⁵ Imports
Thousand Barrels per Day									
1973	AVERAGE	6,256	3,244	3,012	231	2	229	6,025	
1974	AVERAGE	6,112	3,477	2,635	221	3	218	5,892	
1975	AVERAGE	6,056	4,105	1,951	209	6	204	5,846	
1976	AVERAGE	7,313	5,287	2,026	223	8	215	7,090	
1977	AVERAGE	8,807	6,615	2,193	243	50	193	8,565	
1978	AVERAGE	8,363	6,356	2,008	362	158	204	8,002	
1979	AVERAGE	8,456	6,519	1,937	472	235	237	7,984	
1980	AVERAGE	6,909	5,263	1,646	544	287	258	6,365	
1981	January	6,827	4,932	1,895	558	339	219	6,270	
	February	6,772	4,873	1,899	569	198	371	6,203	
	March	6,028	4,521	1,507	586	210	376	5,442	
	April	5,668	4,338	1,330	570	198	372	5,098	
	May	5,775	4,287	1,489	595	312	283	5,180	
	June	5,435	4,061	1,375	420	123	297	5,015	
	July	5,816	4,296	1,521	571	257	314	5,245	
	August	5,767	4,179	1,588	644	204	440	5,123	
	September	6,365	4,740	1,624	519	194	325	5,845	
	October	5,959	4,380	1,579	738	226	512	5,221	
	November	5,741	4,046	1,695	701	278	423	5,041	
	December	5,843	4,137	1,706	656	189	467	5,187	
		AVERAGE	5,996	4,396	1,599	595	228	367	5,401
1982	January	5,232	3,648	1,585	829	238	591	4,404	
	February	4,691	2,949	1,742	804	304	499	3,887	
	March	4,461	2,856	1,606	882	321	561	3,579	
	April	4,286	2,813	1,474	786	174	611	3,501	
	May	4,784	3,314	1,471	803	262	542	3,981	
	June	5,227	3,782	1,445	703	94	609	4,524	
	July	5,763	4,245	1,518	741	229	512	5,022	
	August	5,156	3,820	1,336	858	304	554	4,298	
	September	5,359	3,603	1,757	791	184	606	4,569	
	October	5,230	3,636	1,594	932	270	662	4,298	
	November*	R 5,726	R 3,863	R 1,864	786	262	524	4,940	
	December**	4,377	3,023	1,354	NA	NA	NA	NA	
		AVERAGE	5,026	3,466	1,560	NA	NA	NA	NA

¹ Includes lease condensate.

² Includes shipments from United States possessions and territories.

³ Includes shipments to United States possessions and territories.

⁴ Includes crude oil for storage in the Strategic Petroleum Reserve.

⁵ Net Imports = Imports minus Exports.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

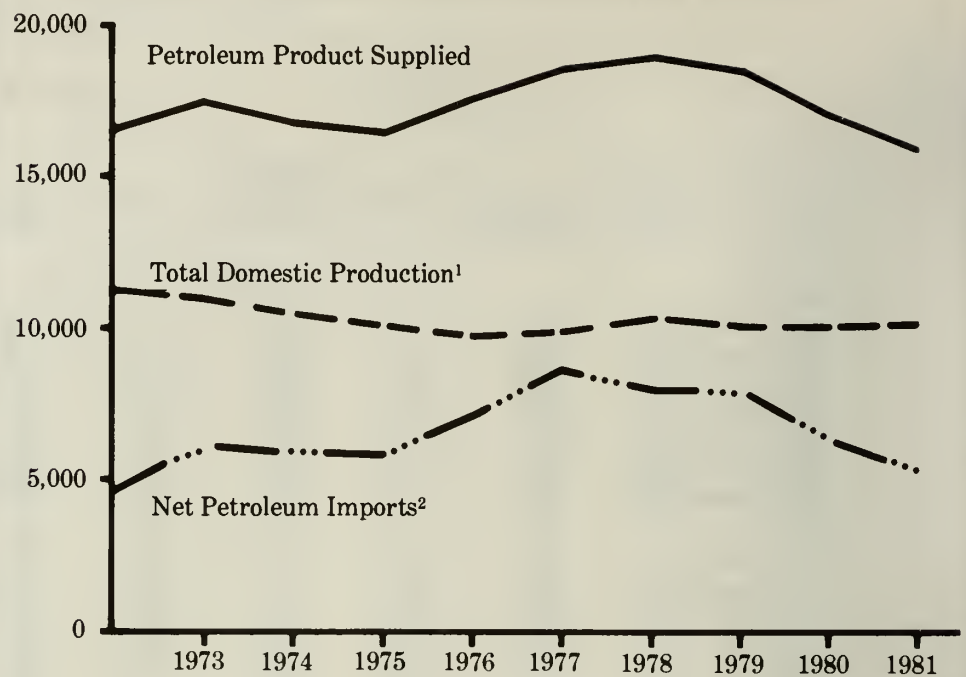
* See Explanatory Note 5.1.

** Italics denote preliminary data. See Explanatory Note 2.7.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Petroleum Overview, Annual (Thousand Barrels per Day)



¹Includes crude oil and natural gas plant production.

²Includes SPR imports.

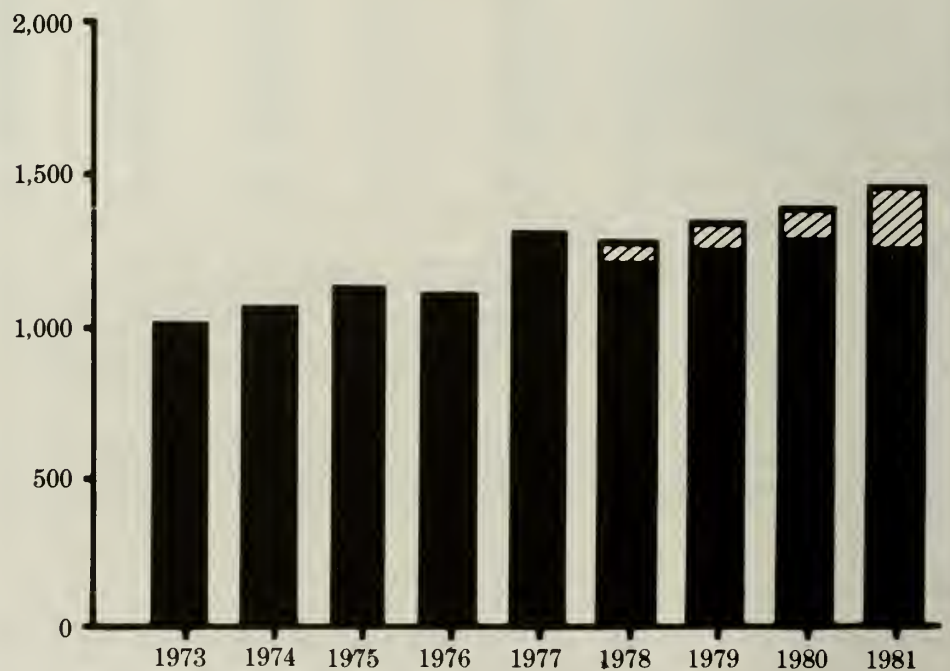
Source table: "Crude Oil and Petroleum Products Overview."

Crude Oil and Petroleum Products Ending Stocks, Annual (Millions of Barrels)

Legend

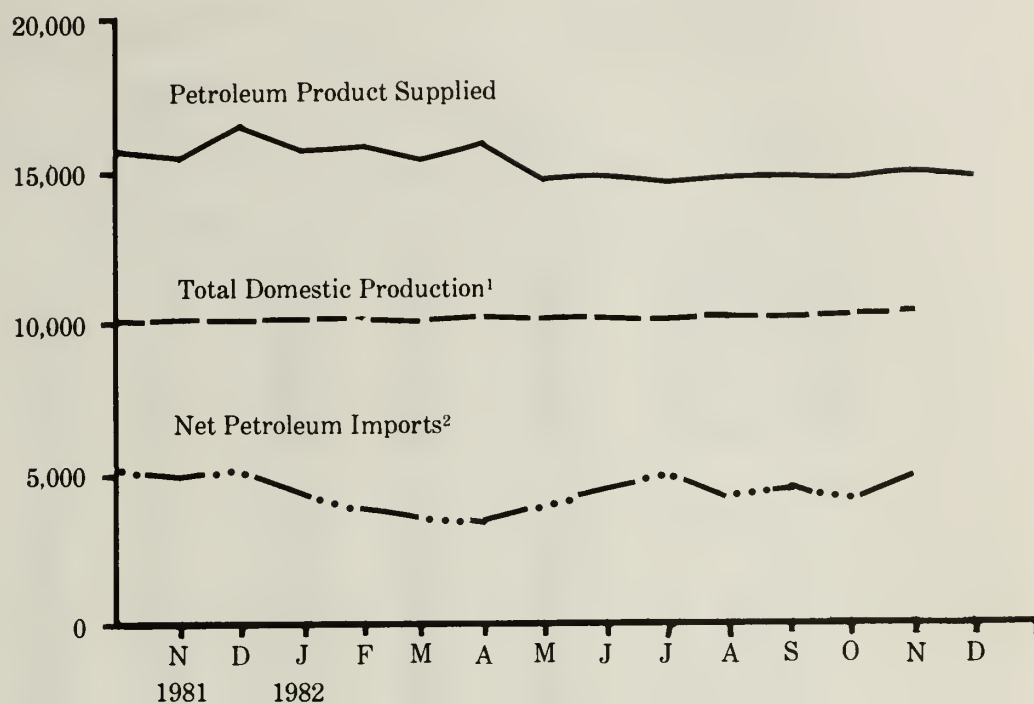
▨ SPR Crude Oil

■ Crude Oil and Petroleum Products, Excluding SPR



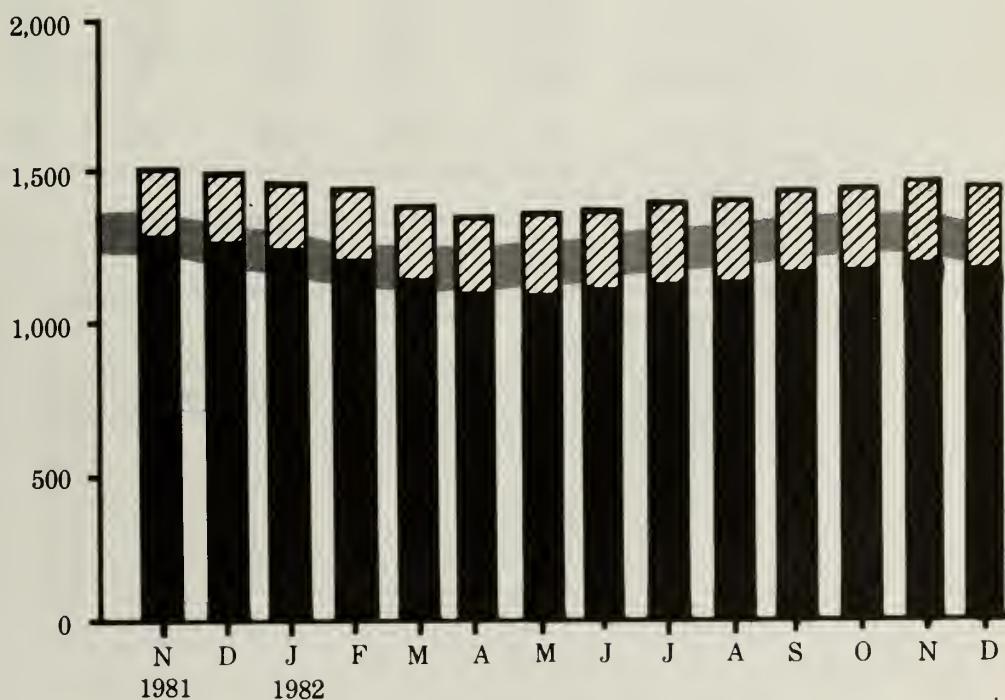
Source tables: "Crude Oil and Petroleum Products Overview" and "Crude Oil Supply and Disposition."

Petroleum Overview, Monthly (Thousand Barrels per Day)



cludes crude oil and natural gas plant
uction.
cludes SPR imports.
rce table: "Crude Oil and Petroleum
ducts Overview."

Crude Oil and Petroleum Product Ending Stocks, Monthly (Millions of Barrels)



end
SPR Crude Oil
Crude Oil and Petroleum Products,
Excluding SPR
Average Stock Range¹

verage stock range (excluding SPR)
ed on 3 years of data. See
planatory Note 2.5.
rce tables: "Crude Oil and
roleum Products Overview" and
ude Oil Supply and Disposition."

Crude Oil¹ Supply and Disposition

		Supply						
		Field Production		Imports ²			Stock Withdrawal ³	
		Total Domestic	Alaskan	Total	SPR ⁴	Other	SPR ⁴	Other
		Thousand Barrels per Day						
1973	AVERAGE	9,208	198	3,244		3,244		11
1974	AVERAGE	8,774	193	3,477		3,477		-62
1975	AVERAGE	8,375	191	4,105		4,105		-17
1976	AVERAGE	8,132	173	5,287		5,287		-39
1977	AVERAGE	8,245	464	6,615	21	6,594	-20	-150
1978	AVERAGE	8,707	1,229	6,356	162	6,195	-163	84
1979	AVERAGE	8,552	1,401	6,519	67	6,452	-67	-81
1980	AVERAGE	8,597	1,617	5,263	44	5,219	-45	-52
1981	January	8,540	1,606	4,932	106	4,826	-151	201
	February	8,604	1,619	4,873	80	4,793	-127	-150
	March	8,613	1,618	4,521	140	4,382	-155	-477
	April	8,557	1,608	4,338	272	4,066	-444	-151
	May	8,501	1,580	4,287	386	3,901	-513	122
	June	8,629	1,632	4,061	318	3,743	-434	299
	July	8,500	1,605	4,296	175	4,121	-324	-36
	August	8,583	1,602	4,179	257	3,922	-372	769
	September	8,604	1,607	4,740	435	4,305	-486	201
	October	8,563	1,596	4,380	453	3,927	-501	-259
	November	8,586	1,614	4,046	271	3,774	-259	-66
	December	8,585	1,623	4,137	165	3,971	-252	82
	AVERAGE	8,572	1,609	4,396	256	4,141	-336	46
1982	January	8,669	1,712	3,648	170	3,478	-159	-77
	February	8,690	1,715	2,949	159	2,790	-213	-3
	March	8,597	1,702	2,856	185	2,671	-235	170
	April	8,652	1,687	2,813	190	2,623	-233	341
	May	8,660	1,725	3,314	204	3,110	-176	225
	June	8,681	1,675	3,782	105	3,678	-105	191
	July	8,649	1,715	4,245	97	4,147	-97	-58
	August	8,701	1,699	3,820	208	3,611	-208	-233
	September	8,733	1,707	3,603	139	3,463	-143	395
	October	8,676	1,677	3,636	216	3,420	-216	-348
	November*	8,690	1,667	R 3,863	R 180	R 3,683	R -179	R -177
	December**	8,660	1,663	3,023	145	2,878	-129	3
	AVERAGE	8,671	1,695	3,466	167	3,299	-174	34

¹ Includes lease condensate.

² Includes shipments from United States possessions and territories.

³ A negative number indicates an increase in stocks and a positive number indicates a decrease.

⁴ Strategic Petroleum Reserve.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 5.2.

** Italics denote preliminary data. See Explanatory Note 2.7.

Note: Annual stock changes for 1975 and 1981 were calculated using expanded survey coverage.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil¹ Supply and Disposition (continued)

		Supply (Continued)		Disposition		Ending Stocks ²		
		Unac- counted for Crude Oil	Crude Used Directly and Losses	Refinery Inputs	Exports ³	Total Crude Oil	SPR ⁴	Other Primary
		Thousand Barrels per Day				Millions of Barrels		
1973	AVERAGE	3	-32	12,431	2	242		242
1974	AVERAGE	-25	-28	12,133	3	265		265
1975	AVERAGE	17	-30	12,442	6	271		271
1976	AVERAGE	77	-33	13,416	8	285		285
1977	AVERAGE	-6	-30	14,602	50	348	7	340
1978	AVERAGE	-57	-30	14,739	158	376	67	309
1979	AVERAGE	-11	-29	14,648	235	430	91	339
1980	AVERAGE	34	-28	13,481	287	466	108	358
1981	January	113	-49	13,247	339	486	112	374
	February	-41	-58	12,902	198	494	116	378
	March	154	-63	12,383	210	514	121	393
	April	51	-62	12,091	198	532	134	397
	May	286	-62	12,309	312	544	150	394
	June	49	-65	12,415	123	548	163	385
	July	147	-65	12,261	257	559	173	386
	August	16	-63	12,908	204	547	185	362
	September	-295	-65	12,505	194	555	199	356
	October	166	-66	12,057	226	579	215	364
	November	279	-68	12,240	278	589	223	366
	December	52	-67	12,349	189	594	230	363
	AVERAGE	83	-63	12,470	228			
1982	January	-138	-66	11,638	238	606	235	371
	February	199	-66	11,252	304	612	241	371
	March	278	-68	11,277	321	614	249	366
	April	56	-68	11,386	174	611	256	355
	May	105	-65	11,801	262	609	261	348
	June	110	-67	12,498	94	607	264	343
	July	1	-63	12,447	229	612	267	345
	August	140	-59	11,858	304	625	274	352
	September	-218	-59	12,126	184	618	278	340
	October	324	-53	11,750	270	635	285	351
	November*	-141	-52	R 11,741	262	R 646	R 290	R 356
	December**	NA	NA	11,772	NA	648	293	354
	AVERAGE	NA	NA	11,798	NA			

¹ Includes lease condensate.

² Ending stocks for 1973-1980 are totals as of December 31.

³ Includes shipments to United States possessions and territories.

⁴ Strategic Petroleum Reserve.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

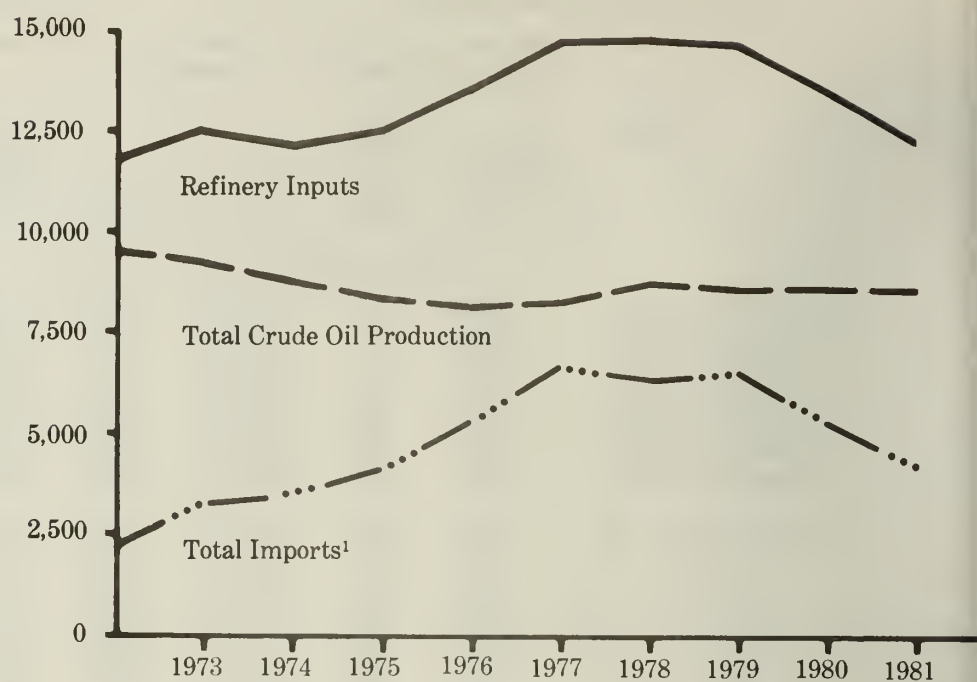
* See Explanatory Note 5.2.

** Italics denote preliminary data. See Explanatory Note 2.7.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil Supply and Disposition, Annual (Thousand Barrels per Day)



¹Includes SPR imports.

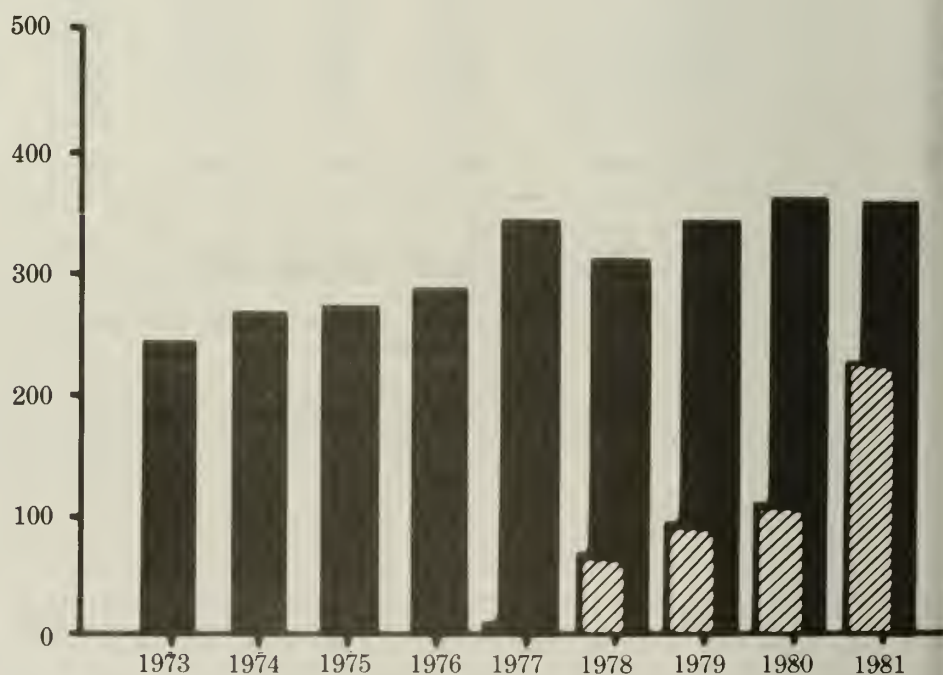
Source table: "Crude Oil Supply and Disposition."

Crude Oil Ending Stocks, Annual (Millions of Barrels)

Legend

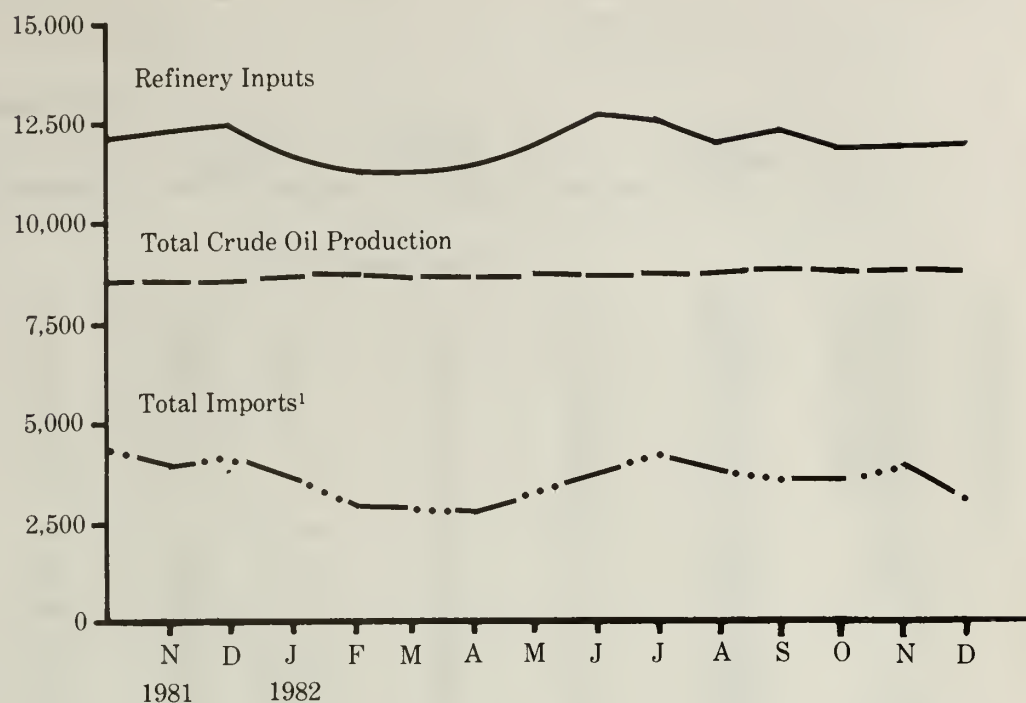
▨ SPR

■ Other Primary



Source table: "Crude Oil Supply and Disposition."

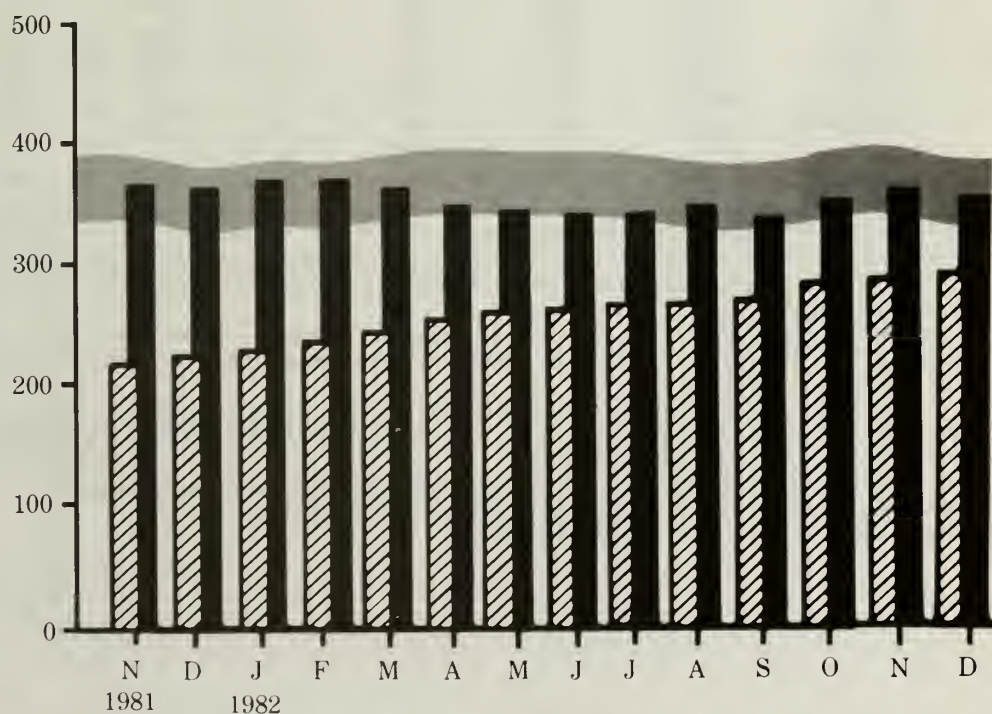
Crude Oil Supply and Disposition, Monthly (Thousand Barrels per Day)



udes SPR imports.

ce table: "Crude Oil Supply and
osition."

Crude Oil Ending Stocks, Monthly (Millions of Barrels)



nd
SPR
Other Primary
Average Stock Range¹

verage stock range (excluding SPR)
l on 3 years of data. See
anatory Note 2.5.

ce table: "Crude Oil Supply and
osition."

Finished Motor Gasoline Supply and Disposition

		Supply			Disposition				Ending Stocks	
		Total Produc- tion	Imports ¹	Stock With- drawal ^{1 2}	Exports	Product Supplied			Total Motor Gasoline ³	Finished Motor Gasoline
						Total	Unleaded ⁴	Unleaded		
Thousand Barrels per Day								Percent of Total	Millions of Barrels	
1973	AVERAGE	6,535	134	9	4	6,674	NA	NA	209	
1974	AVERAGE	6,360	204	-24	2	6,537	NA	NA	218	
1975	AVERAGE	6,520	184	-28	2	6,675	NA	NA	235	
1976	AVERAGE	6,841	131	10	3	6,978	NA	NA	231	
1977	AVERAGE	7,033	217	-72	2	7,177	1,976	27.5	258	
1978	AVERAGE	7,169	190	54	1	7,412	2,521	34.0	238	
1979	AVERAGE	6,852	181	2	(s)	7,034	2,798	39.8	237	
1980	AVERAGE	6,506	140	-66	1	6,579	3,067	46.6	261	
1981	January	6,715	138	-421	(s)	6,431	3,141	48.8	276	227
	February	6,308	111	-118	1	6,301	3,095	49.1	284	230
	March	6,213	171	-81	(s)	6,303	3,097	49.1	285	232
	April	6,114	186	303	(s)	6,602	3,284	49.7	272	223
	May	6,122	150	344	1	6,615	3,115	47.1	259	213
	June	6,220	186	622	1	7,028	3,419	48.6	242	194
	July	6,405	151	268	(s)	6,823	3,424	50.2	228	186
	August	6,611	124	-95	3	6,637	3,344	50.4	233	189
	September	6,564	169	-70	2	6,662	3,338	50.1	237	191
	October	6,426	147	7	3	6,578	3,257	49.5	236	190
	November	6,564	148	-338	1	6,373	3,198	50.2	248	201
	December	6,586	197	-91	11	6,681	3,444	51.5	253	203
		AVERAGE	6,405	157	28	2	6,588	3,264	49.5	
1982	January	6,181	114	-358	18	5,920	3,033	51.2	262	214
	February	5,917	133	28	8	6,070	3,145	51.8	262	213
	March	6,004	183	469	44	6,612	3,396	51.4	248	199
	April	6,104	177	641	33	6,890	3,494	50.7	223	180
	May	6,322	163	188	23	6,650	3,415	51.3	215	174
	June	6,767	195	-136	14	6,812	3,561	52.3	220	178
	July	6,788	200	-165	24	6,799	3,574	52.6	226	183
	August	6,447	284	-60	16	6,655	3,520	52.9	226	185
	September	6,530	215	-217	22	6,507	3,385	52.0	234	191
	October	6,253	177	-25	15	6,391	3,360	52.6	234	192
	November*	R 6,273	206	91	11	R 6,559	3,448	52.6	R 230	189
	December**	6,447	NA	NA	NA	6,239	NA	NA	237	NA
		AVERAGE	6,339	NA	NA	NA	6,510	NA	NA	

¹ Beginning in 1981 excludes blending components.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Includes motor gasoline blending components. Ending stocks for 1973-1980 are totals as of December 31.

⁴ Includes gasohol.

Totals may not equal sum of components due to independent rounding.

(s) = Less than 500 barrels. NA = Not available. R = Revised data.

* See Explanatory Note 5.3.

** Italics denote preliminary data. See Explanatory Note 2.7.

Notes: Beginning in January 1981, survey forms were modified. See Explanatory Note 4 on Changes for the effects on motor gasoline statistics.

Annual stock changes for 1975 and 1981 were calculated using expanded survey coverage.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Distillate Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Crude Used Directly	Exports	Product Supplied	
		Thousand Barrels per Day						
								Millions of Barrels
1973	AVERAGE	2,822	392	-115	2	9	3,092	196
1974	AVERAGE	2,669	289	-9	2	2	2,948	200
1975	AVERAGE	2,654	155	40	2	1	2,851	209
1976	AVERAGE	2,924	146	62	1	1	3,133	186
1977	AVERAGE	3,278	250	-176	1	1	3,352	250
1978	AVERAGE	3,167	173	93	1	3	3,432	216
1979	AVERAGE	3,153	193	-34	1	3	3,311	229
1980	AVERAGE	2,662	142	64	1	3	2,866	205
1981	January	2,989	273	836	11	(S)	4,109	179
	February	2,809	325	246	11	17	3,373	173
	March	2,484	147	264	9	(S)	2,904	164
	April	2,418	116	-9	10	3	2,532	165
	May	2,454	179	-232	10	(S)	2,411	172
	June	2,501	225	-270	9	(S)	2,464	180
	July	2,395	179	-204	10	2	2,378	186
	August	2,656	174	-450	8	(S)	2,388	200
	September	2,610	129	-235	10	1	2,513	207
	October	2,485	119	197	9	5	2,803	201
	November	2,716	124	36	11	6	2,880	200
	December	2,856	95	277	11	26	3,212	192
	AVERAGE	2,613	173	38	10	5	2,829	
1982	January	2,615	96	780	10	90	3,410	166
	February	2,447	130	689	11	90	3,187	147
	March	2,294	48	612	10	84	2,881	128
	April	2,357	59	631	13	64	2,996	109
	May	2,618	74	-184	10	75	2,444	114
	June	2,731	100	-335	10	55	2,450	125
	July	2,734	124	-761	11	24	2,084	148
	August	2,526	79	-346	10	40	2,228	159
	September	2,658	59	-77	12	139	2,514	161
	October	2,837	97	-290	8	66	2,586	170
	November*	R 2,863	R 141	R -514	8	24	R 2,475	R 186
	December**	2,706	147	32	NA	NA	2,790	181
	AVERAGE	2,616	96	15	NA	NA	2,667	

¹ Ending stocks for 1973 - 1980 are totals as of December 31.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

Totals may not equal sum of components due to independent rounding.

(S) = Less than 500 barrels per day. NA = Not available. R = Revised data.

* See Explanatory Note 5.4.

** Italics denote preliminary data. See Explanatory Note 2.7.

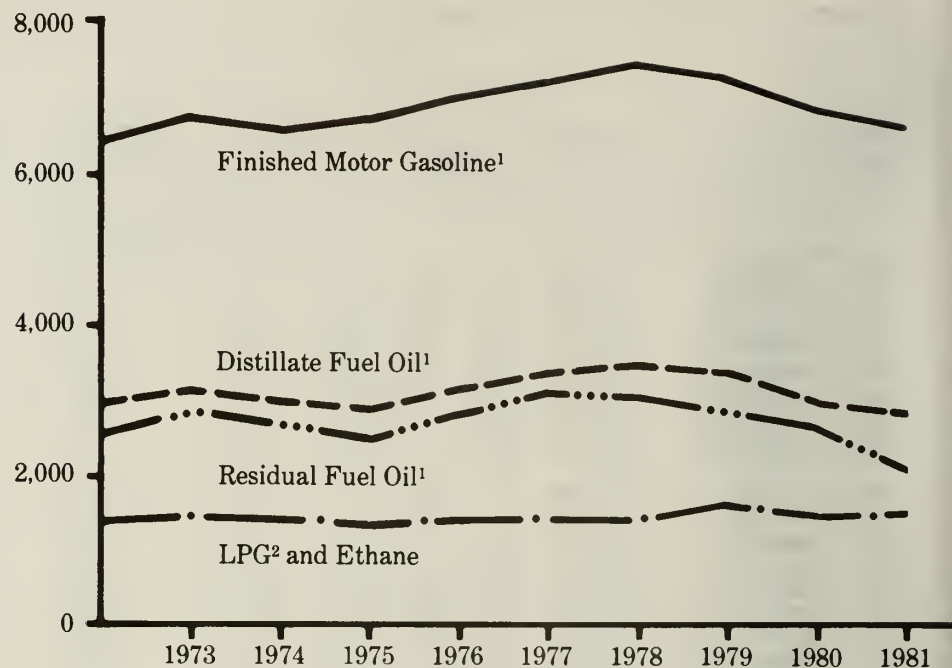
Note: Beginning in January 1981, survey forms were modified. See Explanatory Note 4 on Changes for the effects on Distillate Fuel Oil statistics.

Annual stock changes for 1975 and 1981 were calculated using expanded survey coverage.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Products Supplied, Annual (Thousand Barrels per Day)



¹Figures for 1979 and 1980 recast to account for data system changes in 1981. See Explanatory Note 4.

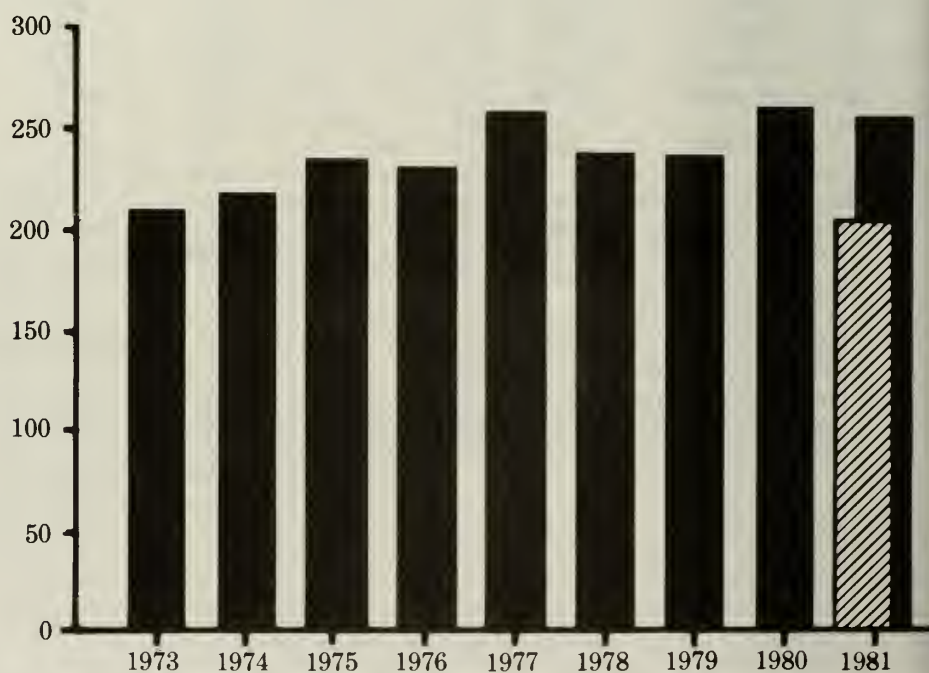
²Liquefied Petroleum Gases.

Source tables: "Finished Motor Gasoline Supply and Disposition," "Distillate Fuel Oil Supply and Disposition," "Residual Fuel Oil Supply and Disposition," "Liquefied Petroleum Gases and Ethane Supply and Disposition."

Motor Gasoline¹ Ending Stocks, Annual (Millions of Barrels)

Legend

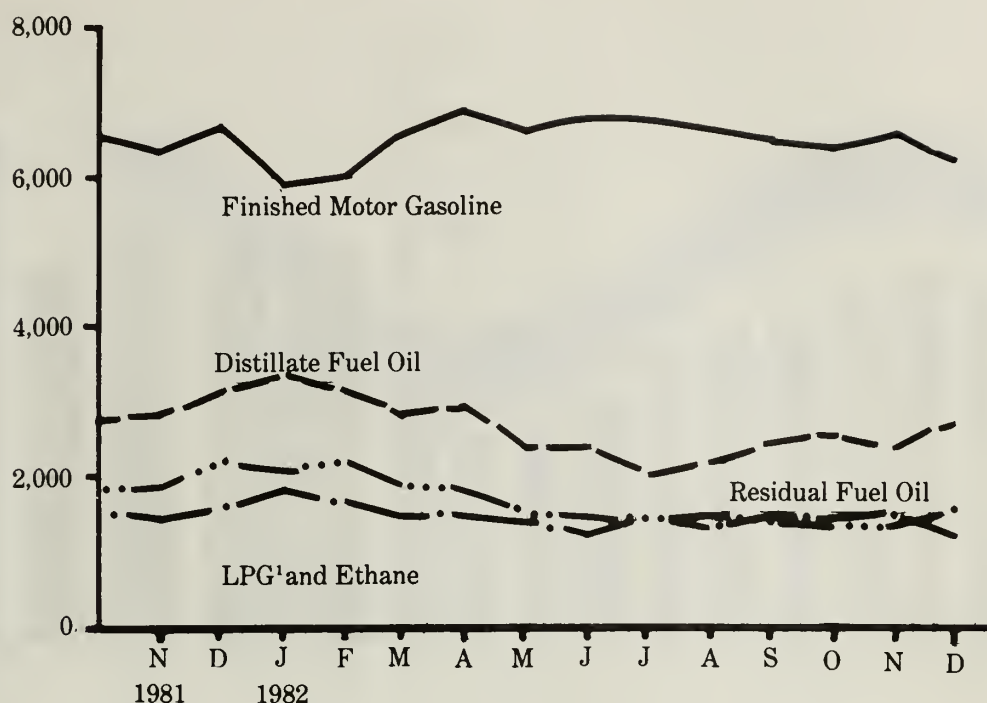
- Total
- ▨ Finished



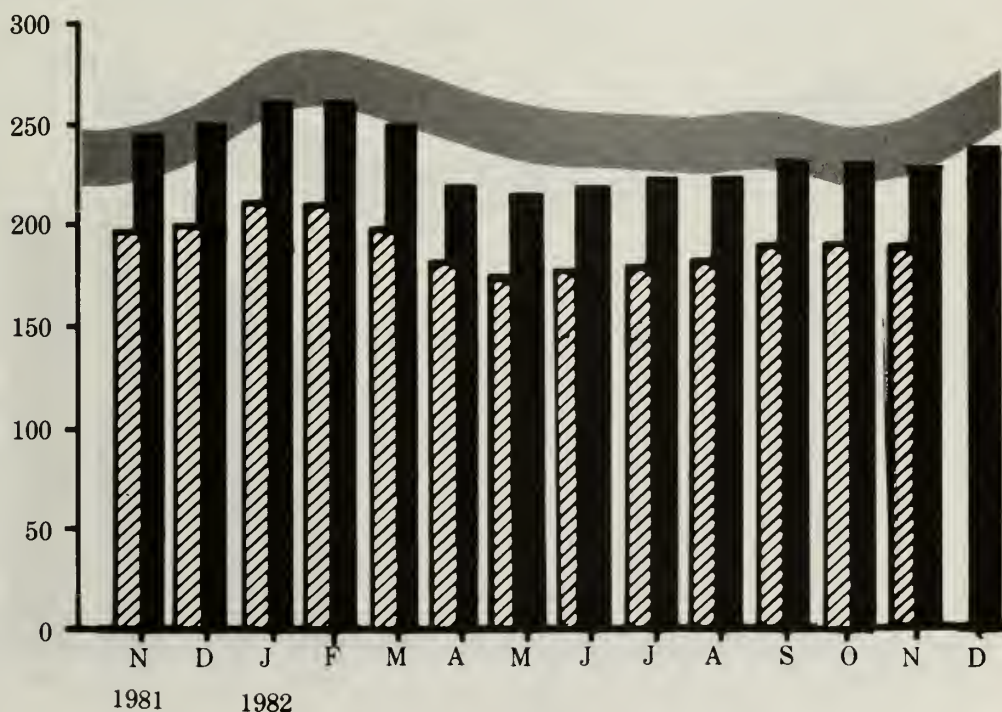
¹Includes finished motor gasoline blending components.

Source table: "Finished Motor Gasoline Supply and Disposition."

Products Supplied, Monthly (Thousand Barrels per Day)

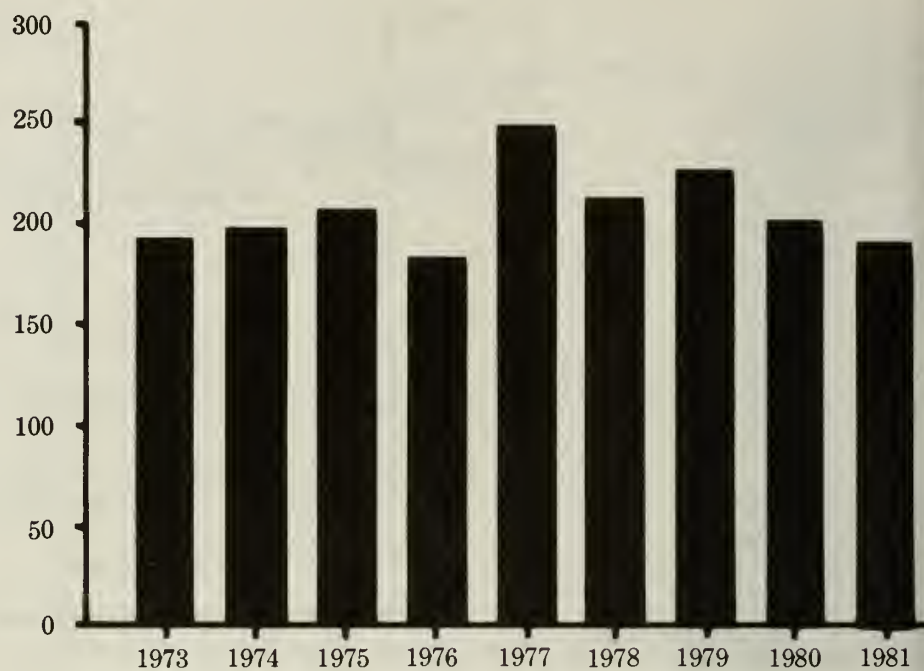


Motor Gasoline Ending Stocks, Monthly (Millions of Barrels)



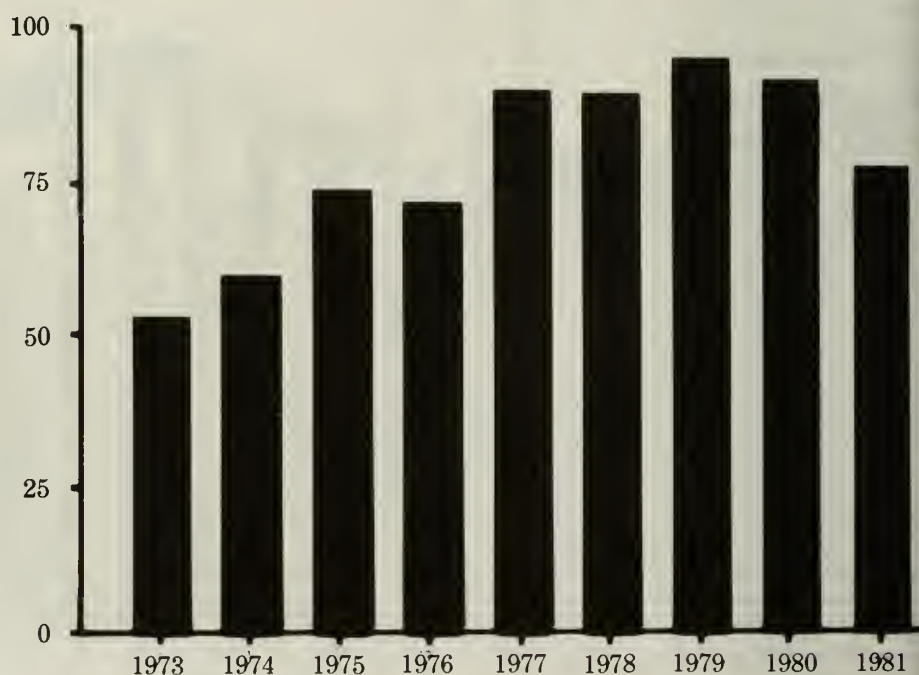
Source table: "Distillate Fuel Oil Supply and Disposition."

Distillate Fuel Oil Ending Stocks, Annual (Millions of Barrels)

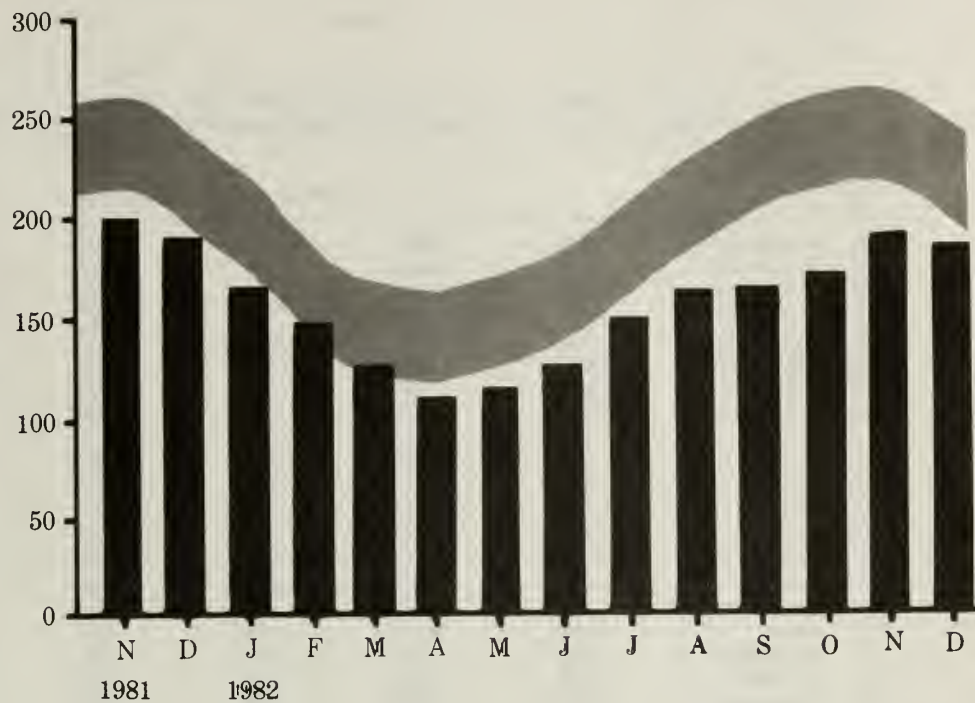


Source table: "Residual Fuel Oil Supply and Disposition."

Residual Fuel Oil Ending Stocks, Annual (Millions of Barrels)



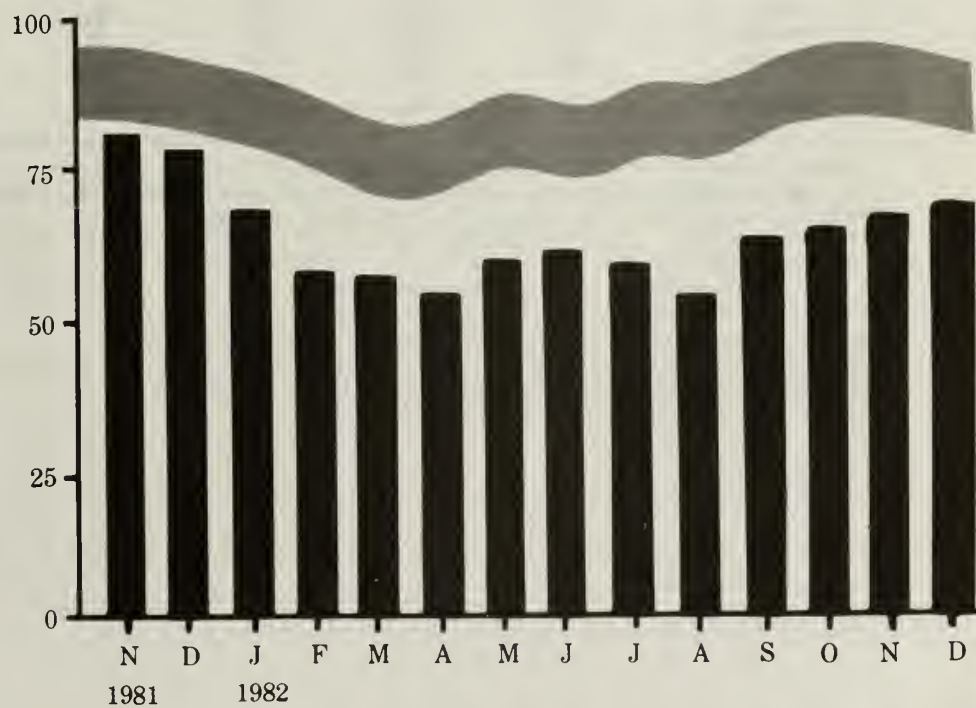
Distillate Fuel Oil Ending Stocks, Monthly (Millions of Barrels)



Average stock range based on 3 years of data. See Explanatory Note 2.5.

Source table: "Distillate Fuel Oil Supply and Disposition."

Residual Fuel Oil Ending Stocks, Monthly (Millions of Barrels)



Average stock range based on 3 years of data. See Explanatory Note 2.5.

Source table: "Residual Fuel Oil Supply and Disposition."

Residual Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Crude Used Directly	Exports	Products Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	971	1,853	5	17	23	2,822	53
1974	AVERAGE	1,070	1,587	-17	13	14	2,639	60
1975	AVERAGE	1,235	1,223	2	15	15	2,462	74
1976	AVERAGE	1,377	1,413	5	17	12	2,801	72
1977	AVERAGE	1,754	1,359	-48	13	6	3,071	90
1978	AVERAGE	1,667	1,355	-1	13	13	3,023	90
1979	AVERAGE	1,687	1,151	-15	12	9	2,826	96
1980	AVERAGE	1,580	939	10	12	33	2,508	92
1981	January	1,612	1,015	302	32	65	2,896	82
	February	1,565	954	150	44	125	2,588	78
	March	1,424	699	100	48	145	2,126	75
	April	1,320	584	66	49	151	1,868	73
	May	1,223	741	-170	49	25	1,817	78
	June	1,232	540	291	49	76	2,037	69
	July	1,174	830	2	48	82	1,971	69
	August	1,231	819	-179	50	69	1,852	75
	September	1,292	841	-176	51	126	1,882	80
	October	1,238	786	8	54	202	1,884	80
	November	1,227	880	-49	53	203	1,909	81
	December	1,329	916	110	52	157	2,250	78
	AVERAGE	1,321	800	37	48	118	2,088	
1982	January	1,183	821	328	53	235	2,150	68
	February	1,136	928	358	53	213	2,261	58
	March	1,121	910	26	53	197	1,912	57
	April	1,162	762	124	52	234	1,867	54
	May	1,127	738	-175	52	191	1,551	59
	June	1,077	643	-49	50	217	1,504	61
	July	1,029	576	51	49	239	1,466	59
	August	1,007	519	200	47	235	1,538	53
	September	1,007	871	-302	44	148	1,472	62
	October	954	758	-56	43	234	1,466	64
	November*	R 989	R 843	R -95	43	182	R 1,597	R 66
	December**	1,032	558	-148	NA	NA	1,297	68
	AVERAGE	1,068	742	20	NA	NA	1,669	

¹ Ending Stocks for 1973-1980 are totals as of December 31.

² A negative number indicates an increase in stocks and a positive number indicates a decrease. Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 5.4.

** Italics denote preliminary data. See Explanatory Note 2.7.

Notes: Beginning in January 1981, survey forms were modified.

See Explanatory Note 4 on changes for the effects on residual fuel oil statistics.

Annual stock changes for 1975 and 1981 were calculated using expanded survey coverage.

Geographic Coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Liquefied Petroleum Gases and Ethane Supply and Disposition

		Supply			Disposition			Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Refinery Inputs	Exports	Product Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	1,600	132	-35	220	27	1,449	99
1974	AVERAGE	1,565	123	-38	220	25	1,406	113
1975	AVERAGE	1,527	112	-35	246	26	1,333	125
1976	AVERAGE	1,535	130	24	260	25	1,404	116
1977	AVERAGE	1,566	161	-55	233	18	1,422	136
1978	AVERAGE	1,537	123	12	239	20	1,413	132
1979	AVERAGE	1,556	217	70	236	15	1,592	111
1980	AVERAGE	1,535	216	-27	233	21	1,469	120
1981	January	1,617	306	363	352	21	1,913	117
	February	1,593	327	173	303	21	1,769	112
	March	1,551	260	-4	257	20	1,530	112
	April	1,586	214	-236	231	26	1,308	119
	May	1,587	189	-258	220	19	1,279	127
	June	1,567	206	-208	237	24	1,304	133
	July	1,507	213	-258	215	17	1,229	141
	August	1,592	195	-242	235	149	1,160	149
	September	1,622	199	-75	287	21	1,438	151
	October	1,593	287	72	320	76	1,556	149
	November	1,571	280	86	383	58	1,495	146
	December	1,468	255	379	428	50	1,624	135
	AVERAGE	1,571	244	-18	289	42	1,466	
1982	January	1,546	314	480	398	67	1,873	122
	February	1,476	291	310	327	51	1,699	114
	March	1,523	223	145	289	74	1,528	109
	April	1,566	188	107	257	77	1,527	106
	May	1,583	186	-61	235	43	1,431	108
	June	1,571	192	-109	262	106	1,286	111
	July	1,556	227	-5	253	37	1,487	111
	August	1,591	125	-44	254	61	1,357	112
	September	1,606	247	33	273	85	1,528	111
	October	1,582	194	92	306	81	1,481	109
	November*	1,603	267	172	370	37	1,634	103
	AVERAGE	1,564	222	101	293	65	1,529	

¹ Ending stocks for 1973 - 1980 are totals as of December 31.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

Totals may not equal sum of components due to independent rounding.

* See Explanatory Note 5.5.

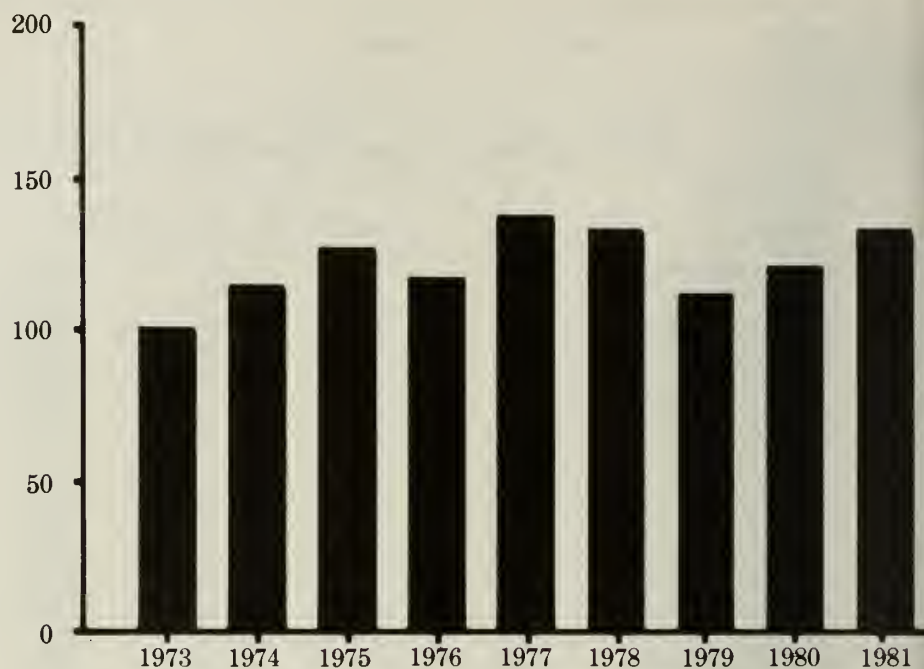
Note: Annual stock changes for 1975 and 1981 were calculated using expanded survey coverage.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Source table: "Liquefied Petroleum Gases and Ethane Supply and Disposition."

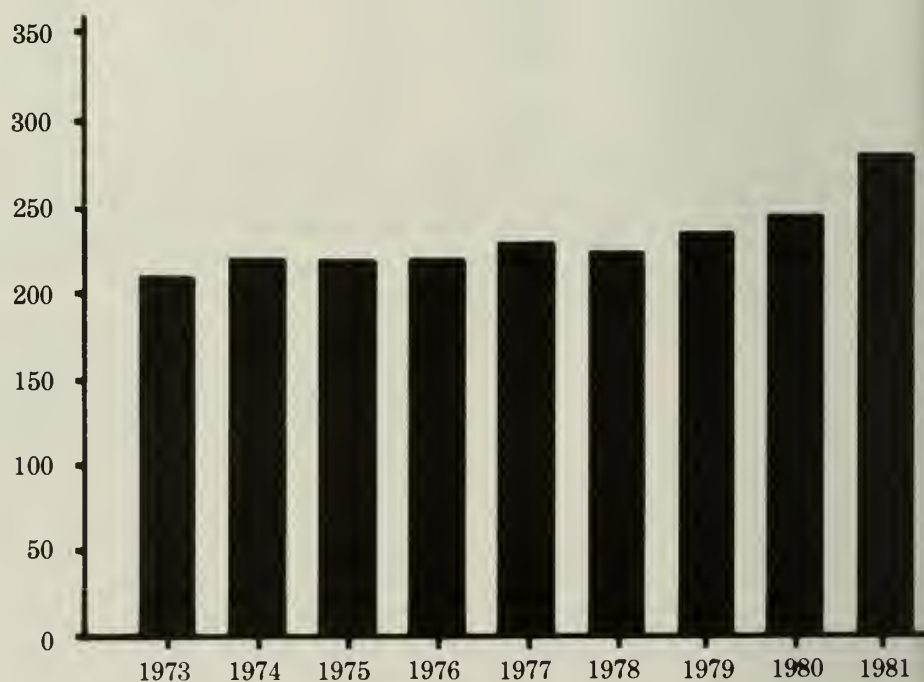
Liquefied Petroleum Gases and Ethane Ending Stocks, Annual (Millions of Barrels)



¹Includes natural gasoline and isopentane, unfinished oils, gasoline blending components, jet fuels, kerosene, lubricants, and asphalt. Some gasoline blending components not included prior to 1981.

Source table: "Other Petroleum Products Supply and Disposition."

Other Petroleum Products¹ Ending Stocks, Annual (Millions of Barrels)



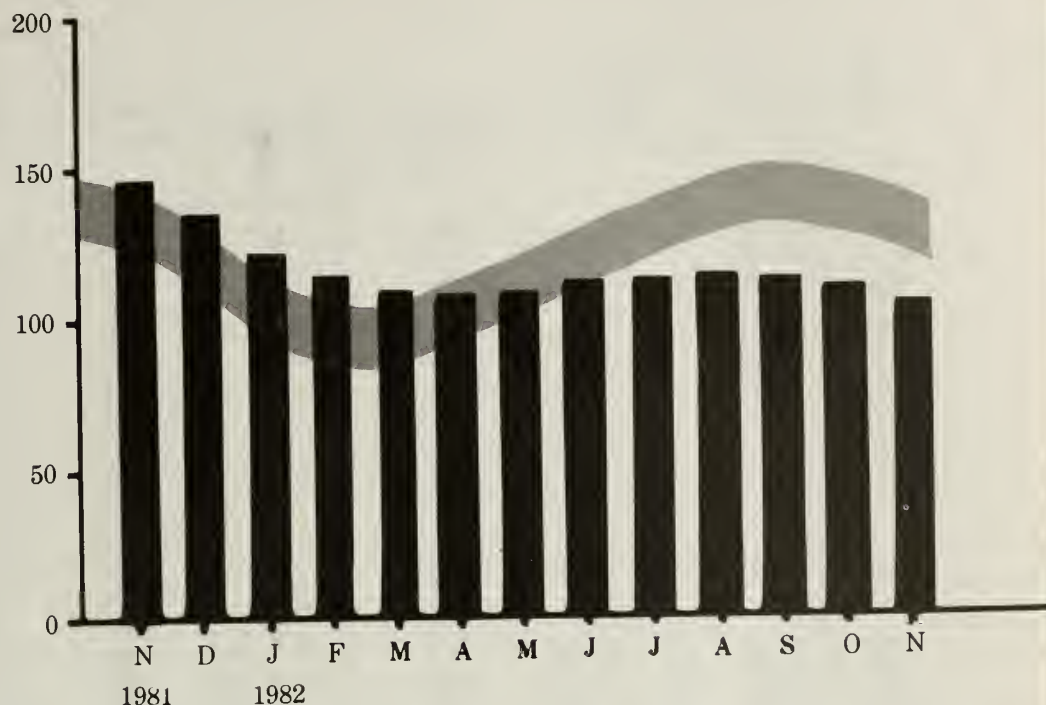
Liquefied Petroleum Gases and Ethane Ending Stocks, Monthly (Millions of Barrels)

Legend

Average Stock Range¹

Average stock range based on 3 years of data. See Explanatory Note 2.5.

Source table: "Liquefied Petroleum Gases and Ethane Supply and Disposition."



Other Petroleum Products¹ Endings Stocks, Monthly (Millions of Barrels)

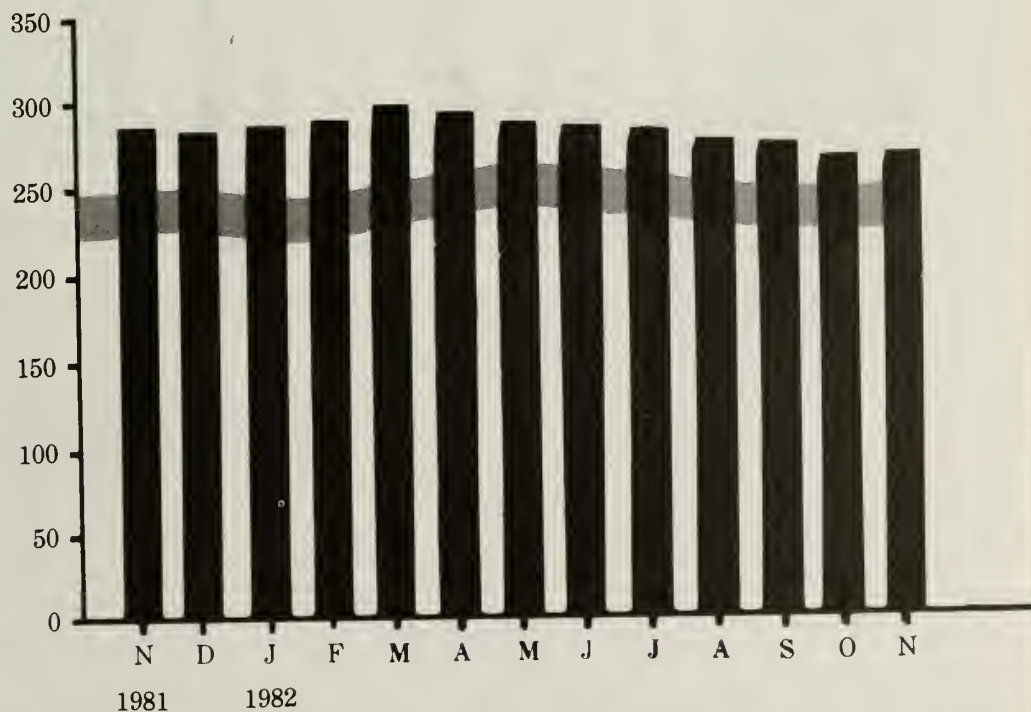
Legend

Average Stock Range²

Includes natural gasoline and sopentane, unfinished oils, gasoline blending components, jet fuels, kerosene, lubricants, and asphalt.

²Average stock range based on 3 years of data. See Explanatory Note 2.5.

Source table: "Other Petroleum Products Supply and Disposition."



Other Petroleum Products¹ Supply and Disposition

		Supply			Disposition			Ending Stocks ²
		Total Production	Imports	Stock Withdrawal ³	Refinery Inputs	Exports	Products Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	3,693	502	-9	750	166	3,270	208
1974	AVERAGE	3,558	432	-28	665	174	3,123	218
1975	AVERAGE	3,424	277	-2	537	160	3,002	219
1976	AVERAGE	3,643	206	-5	524	175	3,145	220
1977	AVERAGE	3,912	205	-27	514	165	3,410	230
1978	AVERAGE	4,046	166	14	492	167	3,568	225
1979	AVERAGE	4,153	195	-37	352	209	3,749	238
1980	AVERAGE	3,956	210	-23	311	198	3,634	247
1981	January	3,821	162	80	851	132	3,081	296
	February	3,723	182	-200	538	208	2,958	302
	March	3,722	230	-55	642	210	3,043	304
	April	3,711	230	24	733	192	3,040	303
	May	3,892	229	-58	594	238	3,231	305
	June	3,925	218	-29	656	197	3,261	306
	July	3,852	149	284	791	212	3,282	297
	August	3,876	276	-33	676	219	3,225	298
	September	3,718	285	215	883	176	3,159	291
	October	3,503	241	193	710	227	3,000	285
	November	3,579	262	33	784	154	2,935	284
	December	3,543	243	71	805	223	2,829	282
	AVERAGE	3,739	226	46	723	199	3,088	
1982	January	3,181	240	-102	602	180	2,536	284
	February	3,364	260	-116	646	138	2,724	287
	March	3,485	241	-204	734	161	2,627	294
	April	3,394	287	91	801	204	2,767	291
	May	3,296	309	198	823	210	2,769	285
	June	3,481	315	115	815	216	2,879	281
	July	3,578	391	15	862	187	2,935	281
	August	3,519	329	256	841	202	3,060	273
	September	3,442	365	74	767	213	2,901	271
	October	3,472	367	223	901	266	2,896	264
	November*	3,464	406	-12	824	269	2,766	264
	AVERAGE	3,425	319	50	784	205	2,806	

¹ Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, and residual fuel oil.

² Ending Stocks for 1973-1980 are totals as of December 31.

³ A negative number indicates an increase in stocks and a positive number indicates a decrease. Totals may not equal sum of components due to independent rounding.

* See Explanatory Note 5.6.

Note: Annual stock changes for 1975 and 1981 were calculated using expanded survey coverage. Geographic Coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil and Petroleum Product Imports from OPEC Sources

	Algeria	Libya	Saudi Arabia	United Arab Emirates	Indonesia	Iran	Nigeria	Venezuela	Other OPEC ¹	Total OPEC	Total Arab OPEC ²
	Thousand Barrels per Day										
1973											
AVERAGE	136	164	486	71	213	223	459	1,135	106	2,993	915
1974											
AVERAGE	190	4	461	74	300	469	713	979	88	3,280	752
1975											
AVERAGE	282	232	715	117	390	280	762	702	122	3,601	1,383
1976											
AVERAGE	432	453	1,230	254	539	298	1,025	700	134	5,066	2,424
1977											
AVERAGE	559	723	1,380	335	541	535	1,143	690	287	6,193	3,185
1978											
AVERAGE	649	654	1,144	385	573	555	919	645	226	5,751	2,963
1979											
AVERAGE	636	658	1,356	281	420	304	1,080	690	212	5,637	3,056
1980											
AVERAGE	488	554	1,261	172	348	9	857	481	130	4,300	2,551
1981											
January	341	500	1,284	93	424	0	908	549	27	4,127	2,219
February	381	468	1,122	93	406	0	866	463	92	3,891	2,064
March	352	485	1,027	47	328	0	771	360	54	3,425	1,912
April	263	485	1,034	68	307	0	812	237	39	3,245	1,867
May	393	443	933	17	297	0	664	331	124	3,203	1,796
June	356	380	865	60	367	0	528	248	118	2,922	1,703
July	333	251	1,073	80	340	0	651	466	38	3,233	1,757
August	348	274	1,082	61	377	0	321	523	84	3,070	1,765
September	336	154	1,477	96	371	0	323	359	149	3,264	2,063
October	242	147	1,342	90	427	0	412	389	172	3,220	1,820
November	210	132	1,270	112	353	0	517	535	56	3,184	1,724
December	176	122	1,045	158	400	0	684	411	132	3,129	1,502
AVERAGE	311	319	1,129	81	366	0	620	406	90	3,323	1,848
1982											
January	254	161	877	87	273	0	662	376	128	2,818	1,378
February	139	92	692	79	236	0	579	347	102	2,267	1,044
March	91	37	555	155	200	0	503	399	91	2,032	860
April	85	0	479	122	215	0	427	411	79	1,818	707
May	179	0	601	116	236	0	211	414	54	1,811	897
June	93	0	593	94	215	72	537	361	110	2,075	799
July	122	0	644	123	327	69	910	349	95	2,640	927
August	170	0	489	133	272	27	542	288	134	2,057	807
September	162	0	432	57	191	21	479	514	52	1,907	659
October	249	7	494	61	227	108	291	496	96	2,029	810
November	247	13	489	47	283	34	480	539	115	2,246	795
AVERAGE	163	28	577	98	243	30	511	409	96	2,155	880

¹ Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar.

² Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait, and Qatar.

Totals may not equal sum of components due to independent rounding.

Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil and Petroleum Product Imports from Non-OPEC Sources

	Bahamas	Canada	Mexico	Netherlands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico ¹	Virgin Islands ¹	Other ²	Total
	Thousand Barrels per Day									
1973										
AVERAGE	174	1,325	16	585	255	15	99	329	465	3,263
1974										
AVERAGE	164	1,070	8	511	251	8	90	391	340	2,832
1975										
AVERAGE	152	846	71	332	242	14	90	406	300	2,454
1976										
AVERAGE	118	599	87	275	274	31	88	422	353	2,247
1977										
AVERAGE	171	517	179	211	289	126	105	466	550	2,614
1978										
AVERAGE	160	467	318	229	253	180	94	429	484	2,613
1979										
AVERAGE	147	538	439	231	190	202	92	431	548	2,819
1980										
AVERAGE	78	455	533	225	176	176	88	388	491	2,609
1981										
January	39	543	401	198	150	233	89	494	552	2,701
February	84	546	437	227	163	271	46	481	626	2,881
March	74	472	488	227	93	263	45	370	571	2,603
April	68	412	418	198	139	402	40	365	380	2,423
May	122	365	522	213	105	368	58	344	474	2,573
June	51	353	538	196	124	397	67	262	525	2,513
July	77	382	384	212	178	553	50	206	541	2,583
August	69	378	489	255	123	592	68	184	539	2,698
September	111	423	708	163	169	528	72	265	661	3,100
October	63	449	669	161	121	351	60	303	562	2,739
November	63	547	628	168	108	253	76	294	421	2,557
December	70	501	587	148	125	280	73	367	563	2,714
AVERAGE	74	447	522	197	133	375	62	327	534	2,672
1982										
January	28	509	426	179	106	346	62	334	425	2,415
February	50	533	489	221	120	132	38	354	487	2,424
March	43	435	503	189	118	293	62	307	479	2,429
April	67	357	467	180	166	247	36	266	682	2,468
May	76	416	767	152	95	516	47	302	603	2,974
June	32	462	797	141	129	539	58	322	673	3,153
July	30	527	783	158	111	433	38	369	674	3,122
August	68	435	854	145	106	520	24	320	627	3,099
September	92	484	897	195	89	631	51	270	744	3,453
October	45	456	682	148	109	666	52	262	783	3,202
November	48	547	860	203	90	623	81	334	694	3,480
AVERAGE	53	469	685	173	113	452	50	313	625	2,931

¹ U.S. Possessions.

² Includes all Non-OPEC countries except those shown above.

Totals may not equal sum of components due to independent rounding.

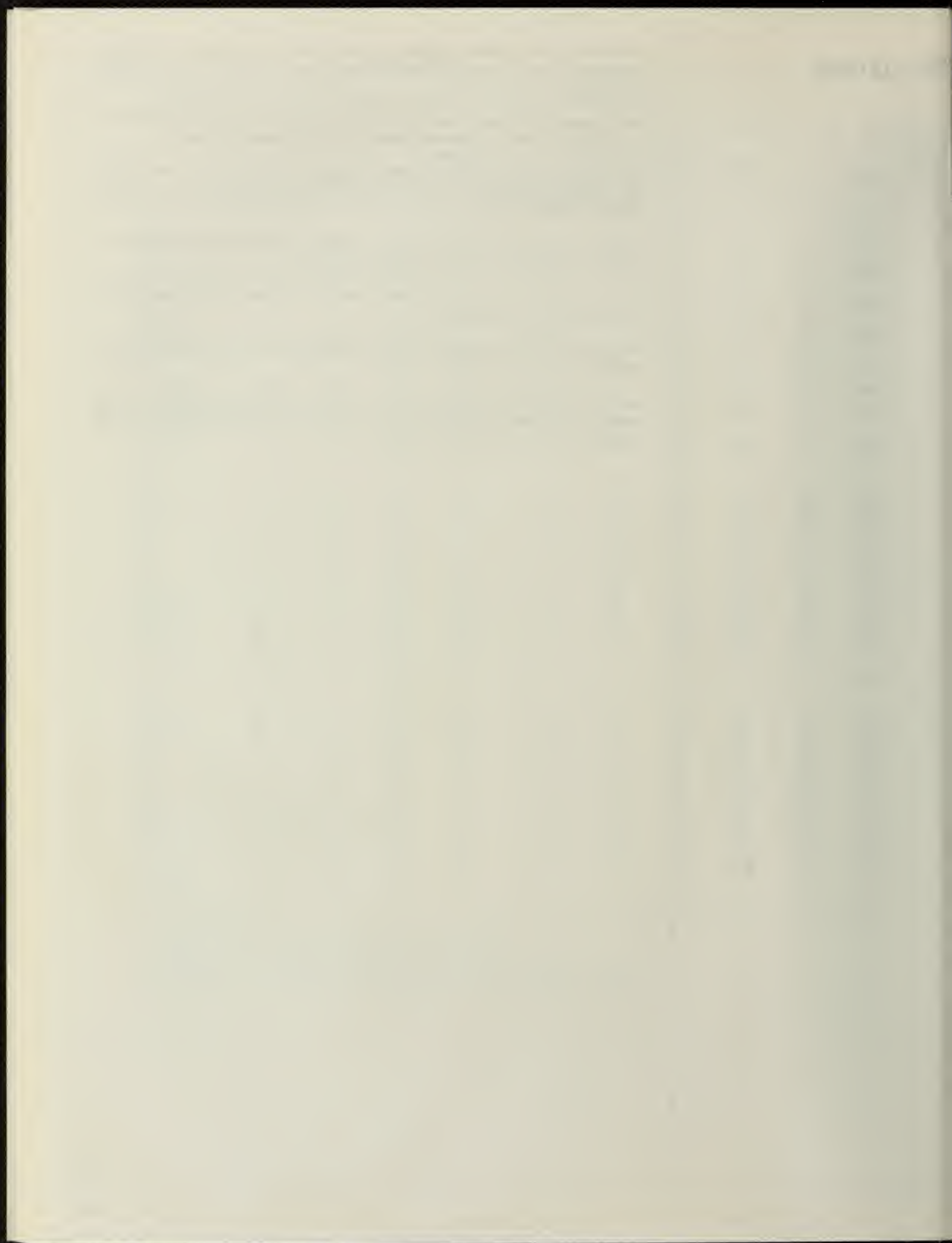
Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Sources

- 1973 through 1976: Bureau of Mines, U.S. Department of the Interior, "Petroleum Statement, Annual" and PAD Districts Supply/Demand, Annual," Mineral Industry Surveys.
- 1977 through 1980: Energy Information Administration, U.S. Department of Energy, "Monthly Petroleum Statistics Report," (unleaded gasoline category).
- 1977 through 1980: Energy Information Administration, U.S. Department of Energy, "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual," "Energy Data Reports.
- January 1981 through December 1981: Energy Information Administration, U.S. Department of Energy, "Petroleum Supply Annual."
- January 1982 through November 1982: Detailed statistics in this issue. (See Explanatory Notes 5.1 through 5.6).
- December 1982: Estimates based on EIA weekly data (except domestic crude oil production). See Explanatory Note 2.2).
- January 1982 through December 1982: Domestic crude oil production estimate based on historical statistics from State Conservation Agencies and the U.S. Geological Survey. (See Explanatory Note 2.7).



Detailed Statistics





Table 1. U.S. Petroleum Balance, November 1982

	Current Month		Year-to-Date	
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
Crude Oil (Including Lease Condensate)				
Field Production				
(1) Alaska	E 49,995	1,667	E 567,215	1,698
(2) Lower 48 States	E 210,715	7,024	E 2,329,297	6,974
(3) Total U.S.	E 260,710	8,690	E 2,896,512	8,672
Net Imports				
(4) Imports (Gross Excluding SPR)	110,490	3,683	1,115,082	3,339
(5) SPR Imports	5,387	180	56,362	169
(6) Exports	7,859	262	80,309	240
(7) Imports (Net Including SPR)	108,018	3,601	1,091,135	3,267
Other Sources				
(8) SPR Withdrawal (+) or Addition (-)	-5,371	-179	-59,622	-179
(9) Other Stock Withdrawal (+) or Addition (-)	-5,325	-177	7,437	22
(10) Used Directly and Losses	-1,560	-52	-20,807	-62
(11) Unaccounted for 1	-4,239	-141	26,823	80
(12) Total Other Sources	-16,495	-550	-46,169	-138
(13) Crude Input to Refineries	352,232	11,741	3,941,478	11,801
(13) = (3) + (7) + (12)				
Natural Gas Plant Liquids (NGPL)				
(14) Field Production	49,017	1,634	516,391	1,546
(15) Imports 2	1,179	39	7,523	23
(16) Stock Withdrawal (+) or Addition (-) 2	-995	-33	3,134	9
(17) Total NGPL Supply	49,200	1,640	527,048	1,578
Other Liquids				
Unfinished Oils and Gasoline Blending Components, Total				
(18) Stock Withdrawal (+) or Addition (-)	3,242	108	8,857	27
(19) Imports	6,730	224	56,271	168
(20) Other Hydrocarbons and Alcohol New Supply (Field Production)	1,595	53	17,681	53
(21) Refinery Processing Gain 1	17,122	571	174,092	521
(22) Crude Used Directly	1,513	50	19,798	59
(23) Total Other Liquids	30,202	1,007	276,699	828
(23) = (18) through (22)				
(24) Total Production of Products 3	431,634	14,388	4,745,225	14,207
(24) = (13) + (17) + (23)				
Net Imports of Refined Products 3				
(25) Imports (Gross)	48,000	1,600	463,519	1,388
(26) Exports	15,723	524	190,548	571
(27) Imports (Net)	32,277	1,076	272,971	817
(28) Total New Supply of Products	463,911	15,464	5,018,196	15,025
(28) = (24) + (27)				
(29) Refined Products Stock Withdrawal (+) or Addition (-) 3	-12,969	-432	68,687	206
(30) Total Petroleum Products Supplied for Domestic Use	450,942	15,031	5,086,883	15,230
(30) = (28) + (29)				
(31) Finished Motor Gasoline	196,783	6,559	2,183,254	6,537
(32) Naphtha-Type Jet Fuel	6,348	212	69,192	207
(33) Kerosene-Type Jet Fuel	25,076	836	266,448	798
(34) Kerosene	4,196	140	40,985	123
(35) Distillate Fuel Oil	74,248	2,475	888,301	2,660
(36) Residual Fuel Oil	47,913	1,597	568,697	1,703
(37) Liquefied Petroleum Gases and Ethane	49,028	1,634	508,341	1,522
(38) Other	54,373	1,812	668,461	2,001
(39) Total Reclassified 1	-7,023	-234	-106,792	-320
(40) Total Product Supplied	450,942	15,031	5,086,885	15,230
(40) = (31) through (39)				
Ending Stocks, All Oils				
(41) Crude Oil and Lease Condensate (Excluding SPR)	356,027	—	356,027	—
(42) Strategic Petroleum Reserve (SPR)	289,963	—	289,963	—
(43) Unfinished Oils	111,679	—	111,679	—
(44) Gasoline Blending Components	41,243	—	41,243	—
(45) Natural Gasoline and Unfractionated Stream	12,385	—	12,385	—
(46) Finished Refined Products 3	643,858	—	643,858	—
(47) Total Stocks	1,455,155	—	1,455,155	—

1 A balancing item.

2 Includes isopentane, natural gasoline, unfractionated stream, and plant condensate only.

3 For products included see Explanatory Note 5.7.

E = Estimated.

— Not Applicable.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1, 2, and 5.7.

Table 2. Supply and Disposition of Crude Oil and Petroleum Products, November 1982
(Thousands of Barrels)

Commodity	Supply					Disposition			Ending Stocks	
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Used Directly and Losses ²	Refinery Inputs	Exports		Products Supplied
Crude Oil (including lease condensate)	E 260,710	0	115,876	-10,696	-4,240	-1,560	352,232	7,859	0	645,990
Natural Gas Plant Liquids and LRGs	48,710	7,774	9,180	4,161	0	0	17,212	1,115	51,498	115,852
Natural Gasoline and Isopentane	6,530	0	978	48	0	0	5,111	0	2,444	6,326
Unfractionated Stream	936	0	0	-912	0	0	0	0	23	4,414
Plant Condensate	940	0	201	-131	0	0	1,008	0	2	1,645
Liquefied Petroleum Gases and Ethane	40,305	7,774	8,001	5,156	0	0	11,093	1,115	49,028	103,467
Ethane	8,703	47	1,256	-246	0	0	34	(s)	9,725	5,406
Propane	13,616	7,871	3,074	3,816	0	0	134	469	27,773	57,870
Butane	6,298	-172	1,902	2,943	0	0	7,392	646	2,933	19,792
Butane-Propane Mixtures	132	57	1,161	-36	0	0	368	0	947	1,395
Ethane-Propane Mixtures	8,373	0	609	-1,302	0	0	0	0	7,680	9,654
Isobutane	3,183	-29	0	-19	0	0	3,165	0	-30	9,350
Other Liquids	1,595	0	6,730	3,242	0	0	18,590	0	-7,023	152,922
Other Hydrocarbons and Alcohol	1,595	0	0	-20	0	0	1,575	0	0	211
Unfinished Oils	0	0	4,907	1,659	0	0	12,040	0	-5,474	111,679
Motor Gasoline Blending Components	0	0	1,823	1,577	0	0	5,027	0	-1,627	40,681
Aviation Gasoline Blending Components	0	0	0	26	0	0	-52	0	78	351
Finished Petroleum Products	306	397,382	39,999	-18,126	0	1,513	0	14,608	406,467	540,391
Finished Motor Gasoline	71	188,128	6,194	2,733	0	0	0	343	196,783	189,362
Finished Leaded Motor Gasoline	68	90,855	3,694	-934	0	0	0	343	93,340	95,678
Finished Unleaded Motor Gasoline	3	97,185	2,500	3,668	0	0	0	0	103,356	93,633
Gasohol	0	88	0	-1	0	0	0	0	87	51
Finished Aviation Gasoline	55	670	(s)	-308	0	0	0	0	417	2,520
Naphtha-Type Jet Fuel	0	5,993	0	355	0	0	0	(s)	6,348	6,035
Kerosene-Type Jet Fuel	0	24,496	861	-12	0	0	0	269	25,076	34,508
Kerosene	2	4,308	1,011	-1,125	0	0	0	1	4,196	11,345
Distillate Fuel Oil	2	85,903	4,229	-15,405	0	234	0	715	74,248	185,592
Residual Fuel Oil	0	29,668	25,297	-2,857	0	1,279	0	5,475	47,913	66,431
Naphtha < 400 Deg. for Petro. Feed. Use	0	4,567	558	-190	0	0	0	71	4,864	2,000
Other Oils > 400 Deg. for Petro. Feed. Use	0	6,748	0	12	0	0	0	522	6,238	2,194
Special Naphthas	60	1,266	828	341	0	0	0	41	2,454	3,460
Lubricants	0	4,450	751	-4	0	0	0	395	4,803	12,648
Waxes	0	446	78	-10	0	0	0	18	496	754
Petroleum Coke	0	12,714	0	-851	0	0	0	6,716	5,147	6,693
Asphalt	0	9,705	192	-964	0	0	0	8	8,925	14,091
Road Oil	0	24	0	-2	0	0	0	0	22	54
Still Gas	0	15,852	0	0	0	0	0	0	15,852	0
Miscellaneous Products	116	2,444	1	161	0	0	0	36	2,685	2,704
Total	311,322	405,156	171,786	-21,419	-4,240	-47	388,034	23,582	450,942	1,455,155

¹ Unaccounted for crude oil is a balancing item.

² Total equals refinery fuel use and loss.

(s) Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 3. Year-to-Date Supply and Disposition Statistics of Crude Oil and Petroleum Products, January - November 1982
(Thousands of Barrels)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Used Directly and Losses ²	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 2,896,512	0	1,171,444	-52,185	26,823	-20,807	3,941,478	80,309	0	645,990
Natural Gas Plant Liquids and LRGs	511,544	90,654	81,827	34,318	0	0	170,131	21,957	526,356	115,852
Natural Gasoline and Isopentane	68,208	0	5,814	3,067	0	0	59,413	0	17,676	6,326
Unfractionated Stream	154	0	0	138	0	0	8	0	284	4,414
Plant Condensate	11,348	0	1,710	-71	0	0	12,932	0	56	1,645
Liquefied Petroleum Gases and Ethane	431,833	90,654	74,304	31,184	0	0	97,778	21,857	508,341	103,467
Ethane	92,112	1,418	15,682	-491	0	0	1,344	1	107,375	5,406
Propane	153,989	84,299	21,320	17,688	0	0	1,326	10,392	265,578	57,870
Butane	73,378	3,510	19,366	7,462	0	0	57,139	11,464	35,113	19,792
Butane-Propane Mixtures	1,376	1,413	8,065	357	0	0	1,844	0	9,366	1,395
Ethane-Propane Mixtures	74,160	0	9,871	6,780	0	0	46	0	90,765	9,654
Isobutane	36,819	14	0	-612	0	0	36,079	0	142	9,350
Other Liquids	17,681	0	56,271	8,857	0	0	189,601	0	-106,792	152,922
Other Hydrocarbons and Alcohol	17,681	0	0	-3	0	0	17,678	0	0	211
Unfinished Oils	0	0	43,235	-331	0	0	113,034	0	-70,130	111,679
Motor Gasoline Blending Components	0	0	13,036	8,851	0	0	59,446	0	-37,559	40,681
Aviation Gasoline Blending Components	0	0	0	340	0	0	-557	0	897	351
Finished Petroleum Products	4,849	4,384,648	389,215	37,503	0	19,798	0	168,691	4,667,322	540,391
Finished Motor Gasoline	545	2,113,237	62,351	14,107	0	0	0	6,987	2,183,254	189,362
Finished Leaded Motor Gasoline	523	1,003,052	39,689	12,407	0	0	0	6,987	1,048,684	95,678
Finished Unleaded Motor Gasoline	23	1,109,101	22,662	1,692	0	0	0	0	1,133,478	93,633
Gasohol	0	1,084	0	8	0	0	0	0	1,092	51
Finished Aviation Gasoline	662	7,836	2	213	0	0	0	0	8,713	2,520
Naphtha-Type Jet Fuel	0	66,776	1,682	1,019	0	0	0	285	69,192	6,035
Kerosene-Type Jet Fuel	2	260,320	7,721	-497	0	0	0	1,098	266,448	34,508
Kerosene	38	37,531	4,032	-303	0	0	0	314	40,985	11,345
Distillate Fuel Oil	26	871,126	30,455	5,949	0	3,434	0	22,689	888,301	185,592
Residual Fuel Oil	0	357,938	253,510	11,561	0	16,364	0	70,677	568,697	66,431
Naphtha < 400 Deg. for Petro. Feed.	0	50,626	16,742	469	0	0	0	1,317	66,520	2,000
Other Oils > 400 Deg. for Petrochem. Feedstock	0	88,799	0	-444	0	0	0	6,568	81,787	2,194
Special Naphthas	843	17,190	6,635	504	0	0	0	1,727	23,445	3,460
Lubricants	0	48,012	3,302	1,656	0	0	0	5,573	47,397	12,648
Waxes	0	4,686	432	-84	0	0	0	231	4,803	754
Petroleum Coke	0	136,008	0	-2,191	0	0	0	50,516	83,301	6,693
Asphalt	0	112,056	1,671	5,496	0	0	0	285	118,938	14,091
Road Oil	0	601	2	-28	0	0	0	0	575	54
Still Gas	0	185,438	0	0	0	0	0	0	185,438	0
Miscellaneous Products	2,733	26,468	677	76	0	0	0	424	29,529	2,704
Total	3,430,586	4,475,302	1,698,757	28,493	26,823	-1,009	4,301,210	270,857	5,086,885	1,455,155

¹ Unaccounted for crude oil is a balancing item.

² Total equals refinery fuel use and loss.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, November 1982
(Thousand Barrels per Day)

Commodity	Supply					Disposition			
	Field Production	Refinery Production	Imports	Stock Withdrawal(+) Addition(-)	Unaccounted For Crude Oil ¹	Crude Used Directly and Losses ²	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 8,690	0	3,863	-357	-141	-52	11,741	262	0
Natural Gas Plant Liquids and LRGs	1,624	259	306	139	0	0	574	37	1,717
Natural Gasoline and Isopentane	218	0	33	2	0	0	170	0	81
Unfractionated Stream	31	0	0	-30	0	0	0	0	1
Plant Condensate	31	0	7	-4	0	0	34	0	(s)
Liquefied Petroleum Gases and Ethane	1,343	259	267	172	0	0	370	37	1,634
Ethane	290	2	42	-8	0	0	1	(s)	324
Propane	454	262	102	127	0	0	4	16	926
Butane	210	-6	63	98	0	0	246	22	98
Butane-Propane Mixtures	4	2	39	-1	0	0	12	0	32
Ethane-Propane Mixtures	279	0	20	-43	0	0	0	0	256
Isobutane	106	-1	0	-1	0	0	105	0	-1
Other Liquids	53	0	224	108	0	0	620	0	-234
Other Hydrocarbons and Alcohol	53	0	0	-1	0	0	52	0	0
Unfinished Oils	0	0	164	55	0	0	401	0	-182
Motor Gasoline Blending Components	0	0	61	53	0	0	168	0	-54
Aviation Gasoline Blending Components	0	0	0	1	0	0	-2	0	3
Finished Petroleum Products	10	13,246	1,333	-604	0	50	0	487	13,549
Finished Motor Gasoline	2	6,271	206	91	0	0	0	11	6,559
Finished Leaded Motor Gasoline	2	3,028	123	-31	0	0	0	11	3,111
Finished Unleaded Motor Gasoline	(s)	3,239	83	122	0	0	0	0	3,445
Gasohol	0	3	0	(s)	0	0	0	0	3
Finished Aviation Gasoline	2	22	(s)	-10	0	0	0	0	14
Naphtha-Type Jet Fuel	0	200	0	12	0	0	0	(s)	212
Kerosene-Type Jet Fuel	0	817	29	(s)	0	0	0	9	836
Kerosene	(s)	144	34	-37	0	0	0	(s)	140
Distillate Fuel Oil	(s)	2,863	141	-514	0	8	0	24	2,475
Residual Fuel Oil	0	989	843	-95	0	43	0	182	1,597
Naphtha < 400 Deg. for Petro. Feed. Use	0	152	19	-6	0	0	0	2	162
Other Oils > 400 Deg. for Petro. Feed. Use	0	225	0	(s)	0	0	0	17	208
Special Naphthas	2	42	28	11	0	0	0	1	82
Lubricants	0	148	25	(s)	0	0	0	13	160
Waxes	0	15	3	(s)	0	0	0	1	17
Petroleum Coke	0	424	0	-28	0	0	0	224	172
Asphalt	0	323	6	-32	0	0	0	(s)	297
Road Oil	0	1	0	(s)	0	0	0	0	1
Still Gas	0	528	0	0	0	0	0	0	528
Miscellaneous Products	4	81	(s)	5	0	0	0	1	90
Total	10,377	13,505	5,726	-714	-141	-2	12,934	786	15,031

¹ Unaccounted for crude oil is a balancing item.² Total equals refinery fuel use and loss.

(s) Less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January - November 1982
(Thousand Barrels per Day)

Commodity	Supply					Disposition			
	Field Production	Refinery Production	Imports	Stock Withdrawal(+) Addition(-)	Unaccounted For Crude Oil ¹	Crude Used Directly and Losses ²	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 8,672	0	3,507	-156	80	-62	11,801	240	0
Natural Gas Plant Liquids and LRGs	1,532	271	245	103	0	0	509	65	1,576
Natural Gasoline and Isopentane	204	0	17	9	0	0	178	0	53
Unfractionated Stream	(s)	0	0	(s)	0	0	(s)	0	1
Plant Condensate	34	0	5	(s)	0	0	39	0	(s)
Liquefied Petroleum Gases and Ethane	1,293	271	222	93	0	0	293	65	1,522
Ethane	276	4	47	-1	0	0	4	(s)	321
Propane	461	252	64	53	0	0	4	31	795
Butane	220	11	58	22	0	0	171	34	105
Butane-Propane Mixtures	4	4	24	1	0	0	6	0	28
Ethane-Propane Mixtures	222	0	30	20	0	0	(s)	0	272
Isobutane	110	(s)	0	-2	0	0	108	0	(s)
Other Liquids	53	0	168	27	0	0	568	0	-320
Other Hydrocarbons and Alcohol	53	0	0	(s)	0	0	53	0	0
Unfinished Oils	0	0	129	-1	0	0	338	0	-210
Motor Gasoline Blending Components	0	0	39	26	0	0	178	0	-112
Aviation Gasoline Blending Components	0	0	0	1	0	0	-2	0	3
Finished Petroleum Products	15	13,128	1,165	112	0	59	0	505	13,974
Finished Motor Gasoline	2	6,327	187	42	0	0	0	21	6,537
Finished Leaded Motor Gasoline	2	3,003	119	37	0	0	0	21	3,140
Finished Unleaded Motor Gasoline	(s)	3,321	68	5	0	0	0	0	3,394
Gasohol	0	3	0	(s)	0	0	0	0	3
Finished Aviation Gasoline	2	23	(s)	1	0	0	0	0	26
Naphtha-Type Jet Fuel	0	200	5	3	0	0	0	1	207
Kerosene-Type Jet Fuel	(s)	779	23	-1	0	0	0	3	798
Kerosene	(s)	112	12	-1	0	0	0	1	123
Distillate Fuel Oil	(s)	2,608	91	18	0	10	0	68	2,660
Residual Fuel Oil	0	1,072	759	35	0	49	0	212	1,703
Naphtha < 400 Deg. for Petro. Feed. Use	0	152	50	1	0	0	0	4	199
Other Oils > 400 Deg. for Petro. Feed. Use	0	266	0	-1	0	0	0	20	245
Special Naphthas	3	51	20	2	0	0	0	5	70
Lubricants	0	144	10	5	0	0	0	17	142
Waxes	0	14	1	(s)	0	0	0	1	14
Petroleum Coke	0	407	0	-7	0	0	0	151	249
Asphalt	0	335	5	16	0	0	0	1	356
Road Oil	0	2	(s)	(s)	0	0	0	0	2
Still Gas	0	555	0	0	0	0	0	0	555
Miscellaneous Products	8	79	2	(s)	0	0	0	1	88
Total	10,271	13,399	5,086	85	80	-3	12,878	811	15,230

¹ Unaccounted for crude oil is a balancing item.

² Total equals refinery fuel use and loss.

(s) Less than 500 barrels per day.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 6. PAD District I, Supply and Disposition of Crude Oil and Petroleum Products, November 1982
(Thousands of Barrels)

Commodity	Field Production	Refinery Production	Imports	Supply With- drawal (+) or Addi- tion (-)	Unac- counted For Crude Oil ¹	Crude Used Directly and Losses ²	Net Receipts	Disposition			Ending Stocks
								Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 2,651	0	32,039	-397	-917	0	2,059	35,435	0	0	18,724
Natural Gas Plant Liquids and LRGs	928	1,165	729	-17	0	0	2,681	220	40	5,225	5,443
Liquefied Petroleum Gases	444	1,165	580	-8	0	0	2,681	205	40	4,617	5,406
Ethane	299	0	(s)	0	0	0	0	0	0	299	0
Other Products ³	185	0	149	-9	0	0	0	15	0	310	37
Other Liquids	98	0	2,504	-239	0	0	963	2,263	0	1,063	19,840
Other Hydrocarbons and Alcohol	98	0	0	4	0	0	0	102	0	0	15
Unfinished Oils	0	0	1,763	182	0	0	963	3,293	0	-385	14,835
Motor Gasoline Blending Components	0	0	741	-429	0	0	0	-1,136	0	1,448	4,990
Aviation Gasoline Blending Components	0	0	0	4	0	0	0	4	0	0	0
Finished Petroleum Products	44	38,848	34,629	-21,334	0	0	84,969	0	191	136,964	212,631
Finished Motor Gasoline	44	16,591	4,976	-2,201	0	0	45,148	0	(s)	64,557	61,166
Finished Leaded Motor Gasoline	44	7,120	2,740	-1,203	0	0	20,211	0	(s)	28,911	28,780
Finished Unleaded Motor Gasoline	0	9,471	2,236	-993	0	0	24,937	0	0	35,651	32,379
Gasohol	0	0	0	-5	0	0	0	0	0	-5	7
Finished Aviation Gasoline	0	12	(s)	-190	0	0	158	0	0	-20	516
Naphtha-Type Jet Fuel	0	452	0	157	0	0	543	0	(s)	1,152	370
Kerosene-Type Jet Fuel	0	579	861	-540	0	0	10,442	0	0	11,342	10,074
Kerosene	0	332	1,011	-1,311	0	0	1,223	0	(s)	1,254	5,764
Distillate Fuel Oil	0	10,248	3,731	-12,963	0	0	22,789	0	1	23,805	88,691
Residual Fuel Oil	0	4,050	22,780	-3,595	0	0	2,859	0	1	26,093	36,369
Naphtha and Other Oils for Petrochem.											
Feedstock	0	359	87	-96	0	0	49	0	47	352	198
Special Naphthas	0	-112	286	210	0	0	203	0	5	583	840
Lubricants	0	622	717	-216	0	0	330	0	107	1,346	3,313
Waxes	0	96	52	2	0	0	13	0	5	158	175
Petroleum Coke	0	1,187	0	-248	0	0	0	0	3	936	1,174
Asphalt	0	2,321	125	-341	0	0	390	0	4	2,491	3,768
Road Oil	0	0	0	0	0	0	0	0	0	0	0
Still Gas	0	1,663	0	0	0	0	0	0	0	1,663	0
Miscellaneous Products	0	448	1	-2	0	0	822	0	17	1,251	413
Total	3,720	40,013	69,901	-21,988	-917	0	90,672	37,918	231	143,252	256,838

¹ Unaccounted for crude oil is a balancing item.² Total equals refinery fuel use and loss.³ Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 7. PAD District II Supply and Disposition of Crude Oil and Petroleum Products, November 1982
(Thousands of Barrels)

Commodity	Field Production	Refinery Production	Imports	Supply		Crude Used Directly and Losses ²	Net Receipts	Disposition		
				Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹			Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 31,299	0	18,872	-3,583	32,374	-9	1,574	79,320	1,207	0
Natural Gas Plant Liquids and LRGs	9,401	2,022	5,056	851	0	0	4,244	5,584	8	15,923
Liquefied Petroleum Gases	8,003	2,005	3,801	2,602	0	0	3,009	4,217	8	15,195
Ethane	2,596	17	1,256	-433	0	0	0	0	0	3,436
Other Products ³	-1,198	0	0	-1,318	0	0	1,235	1,367	0	-2,648
Other Liquids	148	0	583	793	0	0	749	2,844	0	28,321
Other Hydrocarbons and Alcohol	148	0	0	-38	0	0	0	0	0	88
Unfinished Oils	0	0	250	327	0	0	0	686	0	-109
Motor Gasoline Blending Components	0	0	332	466	0	0	749	2,010	0	8,138
Aviation Gasoline Blending Components	0	0	0	38	0	0	0	38	0	104
Finished Petroleum Products	13	89,825	724	802	0	0	18,321	0	621	127,763
Finished Motor Gasoline	0	48,883	2	2,520	0	0	12,514	0	51	55,883
Finished Leaded Motor Gasoline	0	25,458	0	592	0	0	6,437	0	51	29,761
Finished Unleaded Motor Gasoline	0	23,405	2	1,922	0	0	6,077	0	0	26,085
Gasohol	0	20	0	6	0	0	0	0	0	37
Finished Aviation Gasoline	0	100	0	-60	0	0	121	0	0	161
Naphtha-Type Jet Fuel	0	922	0	-33	0	0	189	0	0	1,328
Kerosene-Type Jet Fuel	0	3,654	0	-3	0	0	1,530	0	0	5,181
Kerosene	0	730	0	160	0	0	146	0	(s)	2,795
Distillate Fuel Oil	1	20,757	(s)	-1,001	0	0	3,649	0	(s)	45,257
Residual Fuel Oil	0	2,693	514	78	0	0	-483	0	0	4,996
Naphtha and Other Oils for Petro. Feed	0	1,370	99	50	0	0	47	0	35	261
Special Naphthas	0	398	92	-39	0	0	106	0	1	662
Lubricants	0	764	6	-83	0	0	320	0	12	1,926
Waxes	0	42	3	-4	0	0	0	0	(s)	68
Petroleum Coke	0	3,014	0	-245	0	0	0	0	522	2,033
Asphalt	0	3,243	9	-540	0	0	107	0	1	4,771
Road Oil	0	3	0	0	0	0	0	0	0	20
Still Gas	0	3,115	0	0	0	0	0	0	0	0
Miscellaneous Products	12	137	0	2	0	0	75	0	(s)	122
Total	40,861	91,847	25,235	-1,137	32,374	-9	24,888	87,748	1,836	124,475
										265,278

¹ Unaccounted for crude oil is a balancing item.

² Total equals refinery fuel use and loss.

³ Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 8. PAD District III Supply and Disposition of Crude Oil and Petroleum Products, November 1982
(Thousands of Barrels)

Commodity	Supply					Disposition					
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unac-counted For Crude Oil ¹	Crude Used Directly and Losses ²	Net Receipts	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (Including lease condensate)	E 126,252	0	57,447	-11,431	-23,881	-14	16,269	164,642	0	0	454,162
Natural Gas Plant Liquids and LRGs	35,191	3,535	2,145	3,352	0	0	-6,526	9,501	926	27,270	75,547
Liquefied Petroleum Gases	21,689	3,515	1,167	2,783	0	0	-5,657	5,100	926	17,471	64,296
Ethane	5,800	20	0	187	0	0	0	34	(s)	5,973	3,646
Other Products ³	7,702	0	978	382	0	0	-869	4,367	0	3,826	7,605
Other Liquids	817	0	3,407	2,296	0	0	-1,712	11,134	0	-6,326	66,670
Other Hydrocarbons and Alcohol	817	0	0	9	0	0	0	826	0	0	108
Unfinished Oils	0	0	2,893	681	0	0	-963	6,423	0	-3,812	48,909
Motor Gasoline Blending Components	0	0	514	1,622	0	0	-749	3,981	0	-2,594	17,444
Aviation Gasoline Blending Components	0	0	0	-16	0	0	0	-96	0	80	209
Finished Petroleum Products	207	189,022	2,882	3,491	0	1	-107,171	0	7,228	81,205	135,247
Finished Motor Gasoline	0	86,867	(s)	2,688	0	0	-59,701	0	280	29,574	48,046
Finished Leaded Motor Gasoline	0	40,775	(s)	209	0	0	-27,727	0	280	12,977	24,474
Finished Unleaded Motor Gasoline	0	46,091	0	2,479	0	0	-31,974	0	0	16,596	23,572
Gasohol	0	1	0	0	0	0	0	0	0	1	0
Finished Aviation Gasoline	55	329	0	-19	0	0	-288	0	0	77	716
Naphtha-Type Jet Fuel	0	2,521	0	488	0	0	-868	0	0	2,141	2,546
Kerosene-Type Jet Fuel	0	13,365	0	654	0	0	-12,778	0	245	995	11,182
Kerosene	2	3,058	0	-55	0	0	-1,369	0	0	1,637	2,629
Distillate Fuel Oil	1	40,791	330	160	0	1	-26,692	0	304	14,286	36,858
Residual Fuel Oil	0	13,484	1,666	-558	0	0	-2,851	0	2,127	9,614	16,141
Naphtha and Other Oils for Petro. Feed.	0	8,596	350	-115	0	0	-86	0	509	8,235	3,037
Special Naphthas	60	935	433	80	0	0	-309	0	35	1,166	1,754
Lubricants	0	2,408	28	-2	0	0	-832	0	219	1,383	6,149
Waxes	0	238	18	-12	0	0	-13	0	8	224	456
Petroleum Coke	0	4,771	0	0	0	0	0	0	3,486	1,285	802
Asphalt	0	2,610	57	8	0	0	-497	0	(s)	2,178	3,077
Road Oil	0	0	0	1	0	0	0	0	0	1	1
Still Gas	0	7,326	0	0	0	0	0	0	0	7,326	0
Miscellaneous Products	89	1,723	0	173	0	0	-887	0	15	1,083	1,852
Total	162,467	192,557	65,882	-2,292	-23,881	-13	-99,140	185,277	8,154	102,149	731,625

¹ Unaccounted for crude oil is a balancing item.

² Total equals refinery fuel use and loss.

³ Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Commodity	Field Production	Refinery Production	Imports	Supply Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Used Directly and Losses ²	Net Receipts	Disposition			Ending Stocks
								Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 17,087	0	1,738	-1,092	-4,888	-8	0	12,837	0	0	12,885
Natural Gas Plant Liquids and LRGs	2,278	113	622	-88	0	0	-399	578	0	1,948	1,351
Liquefied Petroleum Gases	893	113	570	-33	0	0	-33	435	0	1,075	1,019
Ethane	9	0	0	(s)	0	0	0	0	0	8	(s)
Other Products ³	1,377	0	52	-55	0	0	-366	143	0	865	332
Other Liquids	39	0	0	-123	0	0	0	-319	0	235	4,619
Other Hydrocarbons and Alcohol	39	0	0	0	0	0	0	39	0	0	0
Unfinished Oils	0	0	0	115	0	0	0	-244	0	359	2,733
Motor Gasoline Blending Components	0	0	0	-238	0	0	0	-114	0	-124	1,886
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0
Finished Petroleum Products	43	13,280	1	-674	0	8	180	0	2	12,836	12,302
Finished Motor Gasoline	28	7,034	0	-482	0	0	205	0	0	6,784	5,276
Finished Leaded Motor Gasoline	24	4,539	0	-402	0	0	-161	0	0	4,000	3,276
Finished Unleaded Motor Gasoline	3	2,492	0	-80	0	0	366	0	0	2,781	1,999
Gasohol	0	3	0	0	0	0	0	0	0	3	1
Finished Aviation Gasoline	0	20	0	2	0	0	9	0	0	31	55
Naphtha-Type Jet Fuel	0	446	0	-47	0	0	-192	0	0	207	346
Kerosene-Type Jet Fuel	0	531	0	-14	0	0	578	0	0	1,095	623
Kerosene	0	79	0	5	0	0	0	0	0	84	34
Distillate Fuel Oil	0	3,409	(s)	40	0	0	-420	0	0	3,029	3,509
Residual Fuel Oil	0	353	0	32	0	8	0	0	0	393	513
Naphtha and Other Oils for Petro. Feed.	0	0	0	0	0	0	0	0	(s)	(s)	0
Special Naphthas	0	2	1	2	0	0	0	0	0	5	8
Lubricants	0	9	0	14	0	0	0	0	0	23	69
Waxes	0	21	0	-6	0	0	0	0	0	15	10
Petroleum Coke	0	299	0	-52	0	0	0	0	(s)	247	713
Asphalt	0	577	0	-171	0	0	0	0	1	405	1,144
Road Oil	0	0	0	3	0	0	0	0	0	3	0
Still Gas	0	473	0	0	0	0	0	0	0	473	0
Miscellaneous Products	15	27	0	(s)	0	0	0	0	(s)	43	2
Total	19,447	13,393	2,361	-1,977	-4,888	0	-219	13,096	2	15,020	31,157

¹ Unaccounted for crude oil is a balancing item.

² Total equals refinery fuel use and loss.

³ Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 10. PAD District V Supply and Disposition of Crude Oil and Petroleum Products, November 1982
(Thousands of Barrels)

Commodity	Field Production	Refinery Production	Imports	Supply Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Used Directly and Losses ²	Net Receipts	Disposition		
								Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 83,421	0	5,781	5,807	-6,928	-1,529	-19,902	59,998	6,652	0
Natural Gas Plant Liquids and LRGs	913	939	627	63	0	0	0	1,329	141	1,071
Liquefied Petroleum Gases	573	929	627	58	0	0	0	1,102	141	944
Ethane	0	10	0	0	0	0	0	0	0	10
Other Products ³	340	0	0	4	0	0	0	227	0	117
Other Liquids	493	0	236	515	0	0	0	2,668	0	-1,424
Other Hydrocarbons and Alcohol	493	0	0	5	0	0	0	498	0	0
Unfinished Oils	0	0	0	354	0	0	0	1,882	0	-1,528
Motor Gasoline Blending Components	0	0	236	156	0	0	0	286	0	106
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	2	0	-2
Finished Petroleum Products	0	66,407	1,763	-410	0	1,504	3,701	0	6,566	66,399
Finished Motor Gasoline	0	28,753	1,215	209	0	0	1,834	0	12	31,999
Finished Leaded Motor Gasoline	0	12,963	953	-129	0	0	1,240	0	12	15,016
Finished Unleaded Motor Gasoline	0	15,726	262	340	0	0	594	0	0	16,922
Gasohol	0	64	0	-2	0	0	0	0	0	62
Finished Aviation Gasoline	0	209	0	-41	0	0	0	0	0	168
Naphtha-Type Jet Fuel	0	1,652	0	-210	0	0	328	0	0	1,770
Kerosene-Type Jet Fuel	0	6,367	0	-109	0	0	228	0	23	6,463
Kerosene	0	109	(s)	76	0	0	0	0	(s)	185
Distillate Fuel Oil	0	10,698	169	-1,641	0	233	674	0	410	9,722
Residual Fuel Oil	0	9,088	337	1,186	0	1,271	475	0	3,346	9,010
Naphtha and Other Oils for Petro. Feed.	0	990	22	-17	0	0	-10	0	1	984
Special Naphthas	0	43	15	88	0	0	182	0	1	145
Lubricants	0	647	1	283	0	0	56	0	56	1,056
Waxes	0	49	5	10	0	0	0	0	5	59
Petroleum Coke	0	3,443	0	-306	0	0	0	0	2,705	432
Asphalt	0	954	0	80	0	0	0	0	2	1,032
Road Oil	0	21	0	-6	0	0	0	0	0	15
Still Gas	0	3,275	0	0	0	0	0	0	0	3,275
Miscellaneous Products	0	109	0	-12	0	0	-10	0	3	84
Total	84,827	67,346	8,407	5,975	-6,928	-25	-16,201	63,995	13,360	66,046
Ending Stocks										170,255

¹ Unaccounted for crude oil is a balancing item.

² Total equals refinery fuel use and loss.

³ Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 11. Production of Crude Oil (Including Lease Condensate) by PAD District and State, for the Most Current Month,¹ September 1982
(Thousands of Barrels)

PAD District and State	Production	
	Total	Daily Average
PAD District I		
Florida	2,008	67
New York	E 69	2
Pennsylvania	E 306	10
Virginia	0	0
West Virginia	E 285	10
Total	E 2,668	89
PAD District II		
Illinois	2,445	82
Indiana	E 388	13
Kansas	5,985	200
Kentucky	E 538	18
Michigan	2,663	89
Missouri	E 19	1
Nebraska	556	19
North Dakota	4,069	136
Ohio	E 1,114	37
Oklahoma	13,892	456
South Dakota	95	3
Tennessee	110	4
Total	E 31,674	1,056
PAD District III		
Alabama	1,549	52
Arkansas	E 1,549	52
Louisiana		
Gulf Coast	34,749	1,158
Rest Of State	2,951	98
Total Louisiana	37,700	1,257
Mississippi	2,675	89
New Mexico		
Northwestern	482	16
Southeastern	5,334	178
Total New Mexico	5,816	194
Texas		
TRRC District 01	2,119	71
TRRC District 02	3,167	106
TRRC District 03	10,586	353
TRRC District 04	2,280	76
TRRC District 05	650	22
TRRC District 06, excluding East Texas	3,446	115
TRRC District 07B	2,716	91
TRRC District 07C	2,753	92
TRRC District 08	19,856	662
TRRC District 08A	19,360	645
TRRC District 09	3,126	104
TRRC District 10	1,707	57
East Texas	4,315	144
Total Texas	76,081	2,536
Total	E 125,370	4,179
PAD District IV		
Colorado	2,426	81
Montana	2,541	85
Utah	E 1,949	65
Wyoming	E 9,863	329
Total	E 16,779	559
PAD District V		
Alaska		
South Alaska	2,273	76
North Slope	48,876	1,629
Total Alaska	51,149	1,705
Arizona	28	1
California		
Central Coastal	6,366	212
East Central	20,437	681
North	16	1
South	6,652	222
Total California	33,471	1,116
Nevada	45	2
Total	84,693	2,823
United States Total	E 261,184	8,706

¹ Includes offshore production.
Sources: See Explanatory Notes on Data Collection and Estimation.
E Estimated.

Table 12. Offshore Production of Crude Oil (Including Lease Condensate) By State, for the Most Current Month,¹ September 1982 (Thousands of Barrels)

State	Offshore Production	
	Total	Daily Average
Alaska ²	2,023	67
California		
Federal	2,423	81
State	3,281	109
California, Total	5,704	190
Louisiana		
Federal	22,437	748
State	1,977	66
Louisiana, Total	24,414	814
Texas		
Federal	1,457	49
State	139	5
Texas, Total	1,596	53
United States Total	33,737	1,125

¹ These production data are included in Table 11.

² All offshore production within State boundaries.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 13. Production of Lease Condensate by State, for the Most Current Month,¹ September 1982 (Thousands of Barrels)

State	Lease Condensate Production	
	Total	Daily Average
Alabama	903	30
California	10	(s)
Louisiana	5,300	177
Mississippi	154	5
New Mexico	294	10
Oklahoma	961	32
Texas	3,407	114
Total	11,029	368

¹ These production data are included in Table 11. Small amounts of lease condensate are known to be produced in states other than those listed, however, statistics on this production are not available.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 14. Natural Gas Processing Plant Production of Petroleum Products by PAD District,¹ November 1982
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Rocky Mt.	Dist. V West Coast
Natural Gas Plant Liquids	560	367	928	(s)	1,881	449	7,070	9,401	19,523	2,758	8,050	828	4,031	35,191	2,278	913	48,710
Isopentane	0	0	0	0	0	0	371	371	422	87	48	0	0	558	2	0	931
Natural Gasoline	88	32	121	0	49	93	991	1,133	1,748	224	1,255	135	245	3,607	380	358	5,600
Unfractionated Stream	29	35	64	(s)	925	89	-3,783	-2,769	9,704	-10,495	626	183	2,714	2,732	928	-19	936
Plant Condensate	0	0	0	0	41	0	26	67	236	613	22	-66	1	806	66	0	940
Liquefied Petroleum Gases and Ethane	443	300	743	0	867	268	9,465	10,599	7,414	12,328	6,099	577	1,070	27,488	901	573	40,305
Ethane	144	155	299	0	382	0	2,214	2,596	918	2,675	2,072	50	84	5,800	9	0	8,703
Propane	176	98	274	0	351	166	3,168	3,684	2,695	3,343	2,020	174	530	8,761	560	336	13,616
Butane	99	31	130	0	54	89	1,288	1,430	1,170	1,875	773	199	212	4,229	324	184	6,298
Butane-Propane Mixtures	0	0	0	0	0	0	0	0	65	22	(s)	11	0	98	0	34	132
Ethane-Propane Mixtures	0	0	0	0	45	0	2,251	2,296	1,956	3,351	599	144	73	6,078	0	0	8,373
Isobutane	23	16	39	0	36	13	544	593	609	1,062	635	0	0	2,523	8	19	3,183
Finished Motor Gasoline	44	0	44	0	0	0	0	0	0	0	0	0	0	0	28	0	71
Finished Leaded Motor Gasoline	44	0	44	0	0	0	0	0	0	0	0	0	0	0	24	0	68
Finished Unleaded Motor Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
Gasohol	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Aviation Gasoline	0	0	0	0	0	0	0	0	55	0	0	0	0	55	0	0	55
Naphtha-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene	0	0	0	0	0	0	0	0	(s)	0	0	0	2	2	0	0	2
Distillate Fuel Oil	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0	0	2
Special Naphthas	0	0	0	0	0	0	0	0	60	0	0	0	0	60	0	0	60
Miscellaneous Products	0	0	0	0	1	0	10	12	71	3	2	11	2	89	15	0	116
Total Production	604	367	971	(s)	1,883	449	7,082	9,414	19,711	2,761	8,052	839	4,035	35,398	2,321	913	49,017

¹ Production represents quantity of natural gas processing plant output less input to fractionating facilities.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 15. Refinery Input of Crude Oil and Petroleum Products by PAD District, November 1982
(Thousands of Barrels, Except Where Noted)

Commodity	PAD District I			PAD District II					PAD District III				PAD		United States		
	East Coast #1	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Dist. IV Rocky Mt.	Dist. V West Coast
Crude Oil (including lease condensate)	33,606	1,829	35,435	1,673	48,341	7,930	21,376	79,320	13,173	84,196	60,161	4,808	2,304	164,642	12,837	59,998	352,232
Natural Gas Plant Liquids																	
Natural Gasoline and Isopentane	15	0	15	0	275	252	722	1,249	808	2,150	393	109	84	3,544	76	227	5,111
Unfractionated Stream	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plant Condensate	0	0	0	0	107	0	11	118	45	546	10	221	1	823	67	0	1,008
LPG and Ethane	189	16	205	145	2,431	487	1,154	4,217	774	1,979	2,168	140	73	5,134	435	1,102	11,093
Ethane	0	0	0	0	0	0	0	0	0	0	34	0	0	34	0	0	34
Propane	0	0	0	0	61	25	0	86	0	0	45	0	0	45	3	0	134
Normal Butane	85	0	85	79	1,046	337	715	2,177	287	1,636	1,112	42	11	3,088	119	349	5,818
Other Butanes	0	0	0	0	373	83	54	510	149	56	117	0	0	322	252	490	1,574
Butane-Propane Mixtures	0	0	0	0	196	0	0	196	0	77	49	0	40	166	6	0	368
Ethane-Propane Mixtures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Isobutane	104	16	120	66	755	42	385	1,248	338	210	811	98	22	1,479	55	263	3,165
Other Liquids																	
Other Hydrocarbons	102	0	102	0	110	0	0	110	16	587	223	0	0	826	39	497	1,574
Alcohol	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Unfinished Oil (net)	3,113	180	3,293	52	245	38	351	686	787	2,507	2,915	69	145	6,423	-244	1,882	12,040
Motor Gasoline Blending Components (net)	-1,092	-44	-1,136	-8	1,802	3	213	2,010	327	1,626	2,137	-68	-41	3,981	-114	286	5,027
Aviation Gasoline Blending Components (net)	4	0	4	0	43	0	-5	38	-75	-4	-17	0	0	-96	0	2	-52
Total Input to Refineries	35,937	1,981	37,918	1,862	53,354	8,710	23,822	87,748	15,855	93,587	67,990	5,279	2,566	185,277	13,096	63,995	388,034
Crude Oil Distillation																	
Gross Input (daily average)	1,145	63	1,208	62	1,650	285	719	2,717	485	2,937	2,059	169	86	5,735	433	2,064	12,157
Operable Capacity (daily average)	1,644	98	1,743	66	2,362	295	885	3,608	622	4,301	2,756	267	107	8,052	589	3,100	17,092
Operating Ratio (percent) ¹	69.6	64.0	69.3	94.4	69.9	96.6	81.3	75.3	78.0	68.3	74.7	63.4	80.1	71.2	73.6	66.6	71.1
Crude Oil Qualities																	
Sulfur Content, Weighted Average (percent)	1.04	.19	.99	.75	.91	1.65	.54	.88	.93	.97	.80	1.36	.36	.91	.90	1.04	.93
API Gravity, Weighted Average	30.91	41.76	31.51	36.90	35.10	30.86	37.22	35.29	38.36	34.38	33.46	33.83	39.08	34.41	35.86	25.79	32.89

¹ Represents gross input divided by operable capacity.
Note: Total may not equal sum of components due to independent rounding.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 10. Refinery Production of Petroleum Products by PAD District, November 1982
(Thousands of Barrels)

Commodity	PAD District I			PAD District II				PAD District III			Total		New Mexico	Total	PAD District IV		United States
	East Coast	Appalachian #1	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	Rocky Mt.	Dist. V West Coast					
Liquefied Petroleum Gases and Ethane	1,165	0	1,165	35	1,312	238	437	2,022	251	1,866	1,255	66	97	3,535	113	939	7,774
For Petrochemical Feedstock Use	261	0	261	0	141	0	46	187	0	796	236	8	36	1,076	-9	159	1,674
For Other Uses	904	0	904	35	1,171	238	391	1,835	251	1,070	1,019	58	61	2,459	122	780	6,100
Ethane	0	0	0	0	17	0	0	17	0	10	10	0	0	20	0	10	47
For Petrochemical Feedstock Use	0	0	0	0	0	0	0	0	0	10	10	0	0	0	0	0	20
For Other Uses	0	0	0	0	17	0	0	17	0	0	0	0	0	0	0	10	27
Propane	1,056	0	1,056	35	1,352	238	527	2,152	231	1,817	1,438	50	47	3,583	162	918	7,871
For Petrochemical Feedstock Use	236	0	236	0	141	0	46	187	0	573	168	0	0	741	0	154	1,318
For Other Uses	820	0	820	35	1,211	238	481	1,965	231	1,244	1,270	50	47	2,842	162	764	6,553
Butane	109	0	109	0	-57	0	-90	-147	20	-14	-190	14	43	-127	-52	45	-174
For Petrochemical Feedstock Use	25	0	25	0	0	0	0	0	0	233	43	8	36	320	0	5	350
For Other Uses	84	0	84	0	-57	0	-90	-147	20	-247	-233	6	7	-447	-52	40	-522
Butane-Propane Mixtures	0	0	0	0	0	0	0	0	0	73	-3	2	7	79	12	-34	57
For Petrochemical Feedstock Use	0	0	0	0	0	0	0	0	0	0	15	0	0	15	0	0	15
For Other Uses	0	0	0	0	0	0	0	0	0	73	-18	2	7	64	12	-34	42
Isobutane for Petro. Feed. Use	0	0	0	0	0	0	0	0	0	-20	0	0	0	0	-9	0	-29
Finished Motor Gasoline	16,031	560	16,591	1,034	30,154	4,582	13,113	48,883	8,694	42,439	32,902	1,795	1,037	86,867	7,034	28,753	188,128
Finished Leaded Motor Gasoline	6,830	290	7,120	490	13,782	2,684	8,502	25,458	4,929	17,593	16,465	1,193	595	40,775	4,539	12,963	90,855
Finished Unleaded Motor Gasoline	9,201	270	9,471	544	16,357	1,898	4,606	23,405	3,764	24,846	16,437	602	442	46,091	2,492	15,726	97,185
Gasohol	0	0	0	0	15	0	5	20	1	0	0	0	0	1	3	64	88
Finished Aviation Gasoline	12	0	12	0	90	0	10	100	7	183	139	0	0	329	20	209	670
Naphthalene-Type Jet Fuel	402	50	452	62	403	103	354	922	766	905	339	190	321	2,521	446	1,652	5,993
Kerosene-Type Jet Fuel	579	0	579	89	2,979	134	452	3,654	682	5,629	7,016	13	25	13,365	531	6,367	24,496
Kerosene	302	30	332	0	623	58	49	730	56	1,576	1,384	2	40	3,058	79	109	4,308
Distillate Fuel Oil	9,662	586	10,248	383	11,081	2,415	6,878	20,757	3,518	22,830	12,075	1,496	872	40,791	3,409	10,698	85,903
Distillate Fuel Oil Less No. 4	9,662	584	10,246	383	11,048	2,415	6,878	20,724	3,493	22,815	11,747	1,429	872	40,116	3,386	10,617	85,089
No. 4 Fuel Oil	0	2	2	0	33	0	0	33	25	15	328	67	240	675	23	81	814
Residual Fuel Oil	3,935	115	4,050	116	1,801	343	433	2,693	720	6,648	5,786	253	77	13,484	353	9,088	29,668
Naphtha < 400 Deg. For Petro. Feed. Use	350	0	350	0	71	0	83	154	312	3,282	234	0	0	3,828	0	235	4,567
Other Oils > 400 Deg. For Petro. Feed. Use	9	0	9	0	1,215	0	1	1,216	-159	1,938	2,939	50	0	4,768	0	755	6,748
Special Naphthas	-133	21	-112	0	252	0	146	398	112	596	46	181	0	935	2	43	1,266
Lubricants	252	370	622	0	449	0	315	764	20	1,577	599	212	0	2,408	9	647	4,450
Bright Stock	28	136	164	0	-1	0	42	41	0	157	44	0	0	201	0	52	458
Neutral	51	217	268	0	364	0	208	572	0	811	455	84	0	1,350	11	390	2,591
Other Grades	173	17	190	0	86	0	65	151	20	609	100	128	0	857	-2	205	1,401
Wax	19	77	96	0	7	0	35	42	6	110	88	34	0	238	21	49	446
Microcrystalline	0	14	14	0	0	0	25	25	6	13	0	34	0	53	0	92	92
Crystalline-Fully Refined	11	14	25	0	7	0	4	11	0	52	88	0	0	140	21	36	233
Crystalline-Other	8	49	57	0	0	0	6	6	0	45	0	0	0	45	0	13	121
Petroleum Coke	1,176	11	1,187	27	1,897	324	766	3,014	253	2,527	1,846	134	11	4,771	299	3,443	12,714
Marketable	474	0	474	0	1,153	206	486	1,845	66	1,241	1,107	109	0	2,523	154	2,633	7,629
Catalyst	702	11	713	27	744	118	280	1,169	187	1,286	739	25	11	2,248	145	810	5,085
Asphalt	2,320	1	2,321	118	1,911	585	629	3,243	493	401	926	715	75	2,610	577	954	9,705
Road Oil	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	21	24
Still Gas	1,578	85	1,663	66	1,904	256	889	3,115	426	4,291	2,393	169	47	7,326	473	3,275	15,852
For Petrochemical Feedstock Use	10	0	10	0	1	0	0	5	289	80	80	0	0	354	14	110	489
For Other Uses	1,568	85	1,653	66	1,903	256	889	3,114	421	4,022	2,313	169	47	6,972	459	3,165	15,363
Miscellaneous Products	418	30	448	2	51	24	60	137	108	800	801	14	0	1,723	27	109	2,444
Total Output	38,077	1,936	40,013	1,932	56,203	9,062	24,650	91,847	16,265	97,598	70,768	5,324	2,602	192,557	13,393	67,346	405,156
Processing Gain(-) or Loss(+)	-2,140	45	-2,095	-70	-2,849	-352	-828	-4,099	-410	-4,011	-2,778	-45	-36	-7,280	-297	-3,351	-17,122

¹ Represents the arithmetic difference between input and output.
Notes: Total may not equal sum of components due to independent rounding.
See Explanatory Notes on negative product yield.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 17. Percent Refinery Yield of Petroleum Products by PAD District,¹ November 1982

Commodity	PAD District I			PAD District II				PAD District III				Total	PAD		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast		No. La., Ark.	New Mexico		Dist. IV Rocky Mt.	Dist. V West Coast
Finished Motor Gasoline ²	45.8	29.3	44.9	52.0	52.3	48.2	50.7	51.5	48.2	41.0	44.3	28.6	37.6	42.4	51.9	43.1	45.1
Finished Aviation Gasoline ³	(s)	.0	(s)	.0	.1	.0	.1	.1	.6	.2	.2	.0	.0	.2	.2	.3	.2
Liquefied Refinery Gases & Ethane	3.2	.0	3.0	2.0	2.7	3.0	2.0	2.5	1.8	2.2	2.0	1.4	4.0	2.1	.9	1.5	2.1
Naphtha-Type Jet Fuel	1.1	2.5	1.2	3.6	.8	1.3	1.6	1.2	5.5	1.0	.5	3.9	13.1	1.5	3.5	2.7	1.6
Kerosene-Type Jet Fuel	1.6	0	1.5	5.2	6.1	1.7	2.1	4.6	4.9	6.5	11.1	.3	1.0	7.8	4.2	10.3	6.7
Kerosene	.8	1.5	.9	0	1.3	.7	.2	.9	.4	1.8	2.2	(s)	1.6	1.8	.6	.2	1.2
Distillate Fuel Oil	26.3	29.2	26.5	22.2	22.8	30.3	31.7	25.9	25.2	26.3	19.1	30.7	35.6	23.8	27.1	17.3	23.6
Residual Fuel Oil	10.7	5.7	10.5	6.7	3.7	4.3	2.0	3.4	5.2	7.7	9.2	5.2	3.1	7.9	2.8	14.7	8.1
Naphtha < 400 Deg. F. Petro. Feed. Use	1.0	0	.9	0	.1	0	.4	.2	2.2	3.8	.4	.0	0	2.2	0	.4	1.3
Other Oils > 400 Deg. F. Petro. Feed. Use	(s)	0	(s)	0	2.5	0	(s)	1.5	-1.1	2.2	4.7	1.0	0	2.8	0	1.2	1.9
Special Naphthas	-4	1.0	-3	0	.5	0	.7	.5	.8	.7	.1	3.7	0	.5	(s)	.1	.3
Lubricants	.7	18.4	1.6	0	.9	0	1.4	1.0	.1	1.8	.9	4.3	0	1.4	.1	1.0	1.2
Wax	.1	3.8	.2	0	(s)	0	.2	.1	(s)	.1	.1	.7	0	.1	.2	.1	.1
Petroleum Coke	3.2	.5	3.1	1.6	3.9	4.1	3.5	3.8	1.8	2.9	2.9	2.7	.4	2.8	2.4	5.6	3.5
Asphalt	6.3	(s)	6.0	6.8	3.9	7.3	2.9	4.1	3.5	.5	1.5	14.7	3.1	1.5	4.6	1.5	2.7
Road Oil	0	0	0	0	(s)	0	0	(s)	0	0	0	.0	0	.0	.0	(s)	(s)
Still Gas for Petro. Feed. Use	(s)	0	(s)	0	(s)	0	0	(s)	(s)	.3	.1	0	0	.2	.1	.2	.1
Still Gas for Other Uses	4.3	4.2	4.3	3.8	3.9	3.2	4.1	3.9	3.0	4.6	3.7	3.5	1.9	4.1	3.6	5.1	4.2
Miscellaneous Products	1.1	1.5	1.2	.1	.1	.3	.3	.2	.8	.9	1.3	.3	0	1.0	.2	.2	.7
Processing Gain(-) or Loss(+) ⁴	-5.8	2.2	-5.4	-4.1	-5.9	-4.4	-3.8	-5.1	-2.9	-4.6	-4.4	-9	-1.5	-4.3	-2.4	-5.4	-4.7

¹ Based on crude oil input and net reruns of unfinished oils.² Based on total finished motor gasoline output plus net output of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and alcohol.³ Based on finished aviation gasoline output plus net output of aviation gasoline blending components.⁴ Represents the arithmetic difference between input and production.

(s) Less than 0.05 percent.

Note: Total may not equal sum of components due to independent rounding.

See Explanatory Notes on negative product yields.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 18. Refinery Receipts of Crude Oil by PAD District, November 1982
(Thousands of Barrels)

Method	PAD District I			PAD District II				PAD District III				PAD District IV		United States			
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico		Total	PAD Rocky Mt.	Dist. V West Coast
Pipeline																	
Domestic	0	1,234	1,234	1,583	32,244	4,172	19,561	57,560	11,499	49,513	30,321	3,276	2,020	96,629	10,198	28,883	194,504
Foreign	0	0	0	181	13,638	3,675	1,428	18,922	737	7,517	4,299	175	0	12,728	1,801	773	34,224
Tanker																	
Domestic	3,042	0	3,042	0	0	0	0	0	0	5,551	4,832	0	0	10,383	0	23,013	36,438
Foreign	26,541	0	26,541	0	742	0	0	742	0	16,907	17,335	0	0	34,242	0	8,292	69,817
Barge																	
Domestic	0	37	37	0	969	0	0	969	0	5,285	4,059	32	0	9,376	0	268	10,650
Foreign	4,281	0	4,281	0	886	0	0	886	0	0	55	786	0	841	0	0	6,008
Tank Cars																	
Domestic	68	349	417	0	0	0	0	0	0	0	0	19	0	19	0	0	436
Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trucks																	
Domestic	0	361	361	0	269	38	858	1,165	661	189	441	968	305	2,564	847	1,378	6,315
Foreign	0	0	0	0	0	0	0	0	171	0	0	0	0	171	0	0	171
Total																	
Domestic	3,110	1,981	5,091	1,583	33,482	4,210	20,419	59,694	12,160	60,538	39,653	4,295	2,325	118,971	11,045	53,542	248,343
Foreign	30,822	0	30,822	181	15,266	3,675	1,428	20,550	908	24,424	21,689	961	0	47,982	1,801	9,065	110,220

Note: Total may not equal sum of components due to independent rounding.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 19. Fuels Consumed at Refineries by PAD District, November 1982
(Thousands of Barrels, Except Where Noted)

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La., Ark., Gulf Coast	New Mexico	Total		Rocky Mt.	Dist. V West Coast
Crude Oil (including lease condensate)	0	0	0	0	0	0	0	0	0	0	6	0	6	0	(s)	6
Liquefied Petroleum Gases¹	12	2	14	(s)	40	15	48	104	1	4	317	0	5	326	7	173
Unfinished Oils	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Distillate Fuel Oil	664	13	676	0	3	0	(s)	3	7	0	2	0	(s)	9	0	0
Residual Fuel Oil	629	52	680	20	319	84	3	426	5	174	86	19	0	285	274	1,980
Marketable Petroleum Coke	0	0	0	0	0	0	0	0	0	(s)	0	0	0	(s)	13	45
Catalyst Petroleum Coke	702	11	713	27	707	68	221	1,024	186	1,231	740	25	11	2,192	145	809
Still Gas	1,378	85	1,463	66	1,821	256	814	2,958	377	3,740	2,069	161	48	6,395	432	14,303
Other Fuels 2	6	0	6	0	79	0	0	79	0	11	0	0	0	11	2	64
Natural Gas (million cubic feet)	1,761	201	1,962	53	4,340	124	3,318	7,835	2,478	21,475	8,778	862	146	33,739	1,111	71,764
Coal (thousand short tons)	0	13	13	0	0	0	0	0	0	0	0	0	0	0	0	13
Purchased Electricity (million kWh)	234	28	262	13	367	46	571	997	77	372	386	22	21	878	123	3,080
Purchased Steam (million pounds)	611	6	617	0	96	0	0	96	0	0	597	0	0	597	0	2,127

¹ Includes liquefied refinery gases.

² Includes small quantities of other petroleum products (e.g., unfinished oils, kerosene, etc.) consumed at refineries.

(s) Less than 500 barrels except where noted.

Note: Total may not equal sum of components due to independent rounding.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 20. Imports of Crude Oil and Petroleum Products by PAD District, November 1982
(Thousands of Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) 1 2	32,039	18,872	57,447	1,738	5,781	115,876
Natural Gas Liquids						
Natural Gasoline and Isopentane	729	5,056	2,145	622	627	9,180
Plant Condensate	149	0	978	0	0	978
Liquefied Petroleum Gases and Ethane	580	5,056	1,167	570	627	8,001
Ethane	(s)	1,256	0	0	0	1,256
Propane	367	2,259	0	328	120	3,074
Butane	214	933	6	242	507	1,902
Butane-Propane Mixtures	(s)	0	1,161	0	0	1,161
Ethane-Propane Mixtures	0	609	0	0	0	609
Other Liquids 1	2,504	583	3,407	0	236	6,730
Unfinished Oils 1	1,763	250	2,893	0	0	4,907
Motor Gasoline Blending Components	741	332	514	0	236	1,823
Finished Petroleum Products	34,629	724	2,882	1	1,763	39,999
Finished Motor Gasoline	4,976	2	(s)	0	1,215	6,194
Finished Leaded Motor Gasoline	2,740	0	(s)	0	953	3,694
Finished Unleaded Motor Gasoline	2,236	2	0	0	262	2,500
Finished Aviation Gasoline	(s)	0	0	0	0	(s)
Naphtha-Type Jet Fuel	0	0	0	0	0	0
Kerosene-Type Jet Fuel	861	0	0	0	0	861
Bonded Aircraft Fuel	0	0	0	0	0	0
Other	861	0	0	0	0	861
Kerosene	1,011	0	0	0	(s)	1,011
Distillate Fuel Oil	3,731	(s)	330	(s)	169	4,229
Bonded ships bunkers	0	0	0	0	0	0
For military offshore use	0	0	0	0	0	0
No. 2 fuel oil	3,731	(s)	330	(s)	169	4,229
No. 4 fuel oil	0	0	0	0	0	0
Residual Fuel Oil	22,780	514	1,666	0	337	25,297
Bonded ships bunkers	0	0	0	0	0	0
For military offshore use	0	0	0	0	0	0
Other	22,780	514	1,666	0	337	25,297
Naphtha < 400 Deg. for Petro. Feed. Use	87	99	350	0	22	558
Other Oils > 400 Deg. for Petro. Feed. Use	0	0	0	0	0	0
Special Naphthas	286	92	433	1	15	828
Lubricants	717	6	28	0	1	751
Wax	52	3	18	0	5	78
Asphalt	125	9	57	0	0	192
Miscellaneous Products	1	0	0	0	0	1
Total Imports	69,901	25,235	65,882	2,361	8,407	171,786

1 Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

2 Includes crude oil imported for storage in the Strategic Petroleum Reserve.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 21. Imports of Crude Oil and Petroleum Products by Source and PAD District, November 1982
(Thousands of Barrels)

Source	Crude Oil 1	LPG and Ethane	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distill. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Products 2	Total Petroleum	Total (Daily Average)
All PAD Districts													
Arab OPEC													
Algeria	4,693	0	0	0	0	198	0	0	2,505	0	0	2,703	7,396
Libya	0	0	0	0	0	0	0	0	378	0	0	378	13
Saudi Arabia	13,589	0	0	236	0	0	0	0	0	0	837	1,073	14,662
United Arab Emirates	1,414	0	0	0	0	0	0	0	0	0	0	0	489
Subtotal Arab OPEC	19,695	0	0	236	0	198	0	0	2,883	0	837	4,154	23,850
Other OPEC													
Ecuador	699	0	0	0	0	0	0	0	189	0	0	189	888
Gabon	2,556	0	0	0	0	0	0	0	0	0	0	0	2,556
Indonesia	7,904	470	0	0	80	0	0	1	30	0	0	581	8,485
Iran	1,023	0	0	0	0	0	0	0	0	0	0	0	1,023
Nigeria	14,205	0	0	0	0	0	0	0	182	1	0	183	14,387
Venezuela	6,398	63	532	935	258	0	451	422	6,211	467	445	9,784	16,182
Subtotal Other OPEC	32,785	533	532	935	338	0	451	423	6,612	467	445	10,737	43,522
Other													
Angola	1,305	0	0	0	0	0	0	0	0	0	0	0	1,305
Australia	0	0	0	0	0	0	0	0	0	0	0	0	0
Bahamas	0	0	882	0	0	241	0	231	96	0	0	1,450	1,450
Brazil	1,210	0	0	0	243	0	0	0	1,343	0	0	1,586	2,796
Brunei	217	0	0	0	0	0	0	0	0	0	0	0	217
Canada	7,322	6,651	250	333	28	0	8	421	808	143	451	9,094	16,415
Egypt	1,949	0	0	0	0	0	0	0	0	0	0	0	1,949
France	0	(\$)	0	0	0	0	0	0	0	(\$)	0	0	0
Ghana	0	0	0	0	0	0	0	0	150	0	0	150	150
Mexico	25,066	691	0	0	(\$)	0	0	21	0	4	9	724	25,791
Netherlands	0	0	0	0	733	0	0	688	0	41	0	1,461	1,461
Netherlands Antilles	0	0	978	0	231	0	0	0	4,892	0	0	6,102	6,102
Norway	1,767	0	0	0	0	0	0	0	0	0	0	0	1,767
Oman	432	0	0	0	0	0	0	11	0	0	0	0	432
People's Republic of China	591	0	0	0	981	0	0	0	0	0	0	992	1,583
Peru	389	0	0	0	0	0	0	0	481	0	0	481	870
Puerto Rico	0	0	478	0	1,005	0	0	0	0	0	937	2,421	2,421
Trinidad and Tobago	2,290	0	0	0	0	0	0	0	404	0	16	419	2,710
United Kingdom	18,207	126	0	116	0	0	0	0	215	0	20	478	18,685
Virgin Islands	0	0	1,178	0	2,043	422	551	2,037	3,785	0	0	10,016	10,016
Zaire	371	0	0	0	0	0	0	0	0	0	0	0	371
Other Western Hemisphere	139	0	0	26	0	0	0	319	1,630	75	0	2,051	2,190
Other Eastern Hemisphere	2,140	(\$)	609	176	591	0	0	80	1,997	97	43	3,593	5,733
Subtotal Other	63,396	7,467	4,375	652	5,856	663	560	3,807	15,802	360	1,476	41,018	104,414
Total Imports	115,876	8,001	4,907	1,823	6,194	861	1,011	4,229	25,297	828	2,759	55,909	171,786

See footnotes at end of table.

Table 21. Imports of Crude Oil and Petroleum Products by Source and PAD District, November 1982
(Thousands of Barrels)
(continued)

Source	Crude Oil 1	LPG and Ethane	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
PAD District I														
Arab OPEC														
Algeria	1,984	0	0	0	0	198	0	0	2,503	0	0	2,702	4,685	156
Libya	0	0	0	0	0	0	0	0	378	0	0	378	378	13
Saudi Arabia	4,284	0	0	0	0	0	0	0	0	0	20	20	4,304	143
Subtotal Arab OPEC	6,268	0	0	0	0	198	0	0	2,881	0	20	3,100	9,367	312
Other OPEC														
Ecuador	348	0	0	0	0	0	0	0	189	0	0	189	538	18
Gabon	1,400	0	0	0	0	0	0	0	0	0	0	0	1,400	47
Indonesia	2,072	0	0	0	0	0	0	0	0	0	0	0	2,072	69
Nigeria	4,730	0	0	0	0	0	0	0	0	0	0	0	4,730	158
Venezuela	2,701	63	532	447	258	0	451	422	5,976	251	97	8,498	11,199	373
Subtotal Other OPEC	11,251	63	532	447	258	0	451	422	6,165	251	97	8,687	19,937	665
Other														
Angola	1,305	0	0	0	0	0	0	0	0	0	0	0	1,305	44
Australia	0	0	0	0	0	0	0	0	0	0	0	0	0	(s)
Bahamas	0	0	0	0	0	241	0	231	96	0	0	568	568	19
Brazil	364	0	0	0	243	0	0	0	1,343	0	0	1,586	1,950	65
Canada	0	392	0	1	26	0	8	354	273	35	282	1,370	1,370	46
France	0	(s)	0	0	0	0	0	0	0	0	(s)	0	0	(s)
Ghana	0	0	0	0	0	0	0	0	150	0	0	150	150	5
Mexico	3,999	0	0	0	0	0	0	0	0	0	0	0	3,999	133
Netherlands	0	0	0	0	733	0	0	688	0	0	0	1,420	1,420	47
Netherlands Antilles	0	0	978	0	231	0	0	0	4,892	0	0	6,102	6,102	203
Norway	500	0	0	0	0	0	0	0	0	0	0	0	500	17
Peru	389	0	0	0	0	0	0	0	481	0	0	481	870	29
Puerto Rico	0	0	253	0	1,005	0	0	0	0	0	712	1,970	1,970	66
Trinidad and Tobago	435	0	0	0	0	0	0	0	0	0	0	0	435	14
United Kingdom	6,594	126	0	116	0	0	0	0	215	0	20	478	7,072	236
Virgin Islands	0	0	0	0	2,043	422	551	2,037	3,785	0	0	8,838	8,838	295
Zaire	371	0	0	0	0	0	0	0	0	0	0	0	371	12
Other Western Hemisphere	0	0	0	0	0	0	0	0	1,347	0	0	1,347	1,347	45
Other Eastern Hemisphere	563	(s)	0	176	437	0	0	0	1,151	(s)	0	1,764	2,327	78
Subtotal Other	14,520	517	1,231	294	4,718	663	560	3,309	13,734	35	1,014	26,075	40,596	1,353
Total Imports	32,039	580	1,763	741	4,976	861	1,011	3,731	22,780	286	1,132	37,862	69,901	2,330
PAD District II														
Arab OPEC														
Algeria	604	0	0	0	0	0	0	0	0	0	0	0	604	20
Saudi Arabia	1,342	0	0	0	0	0	0	0	0	0	0	0	1,342	45
United Arab Emirates	350	0	0	0	0	0	0	0	0	0	0	0	350	12
Subtotal Arab OPEC	2,295	0	0	0	0	0	0	0	0	0	0	0	2,295	76

See footnotes at end of table.

Table 21. Imports of Crude Oil and Petroleum Products by Source and PAD District, November 1982
(Thousands of Barrels)

Source	Crude Oil 1	LPG and Ethane	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Products 2	Total Products	Total Petroleum	Total (Daily Average)
PAD District II														
Other OPEC														
Iran	498	0	0	0	0	0	0	0	0	0	0	0	498	17
Nigeria	3,180	0	0	0	0	0	0	0	0	0	0	0	3,180	106
Subtotal Other OPEC	3,678	0	0	0	0	0	0	0	0	0	0	0	3,678	123
Other														
Canada	4,809	5,056	250	332	2	0	0	(s)	514	92	116	6,364	11,173	372
Egypt	999	0	0	0	0	0	0	0	0	0	0	0	999	33
France	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Mexico	4,531	0	0	0	0	0	0	0	0	0	0	0	4,531	151
United Kingdom	2,118	0	0	0	0	0	0	0	0	0	0	0	2,118	71
Other Eastern Hemisphere	442	0	0	0	0	0	0	0	0	0	(s)	(s)	442	15
Subtotal Other	12,899	5,056	250	332	2	0	0	(s)	514	92	116	6,364	19,263	642
Total Imports	18,872	5,056	250	332	2	0	0	(s)	514	92	116	6,364	25,235	841
PAD District III														
Arab OPEC														
Algeria	2,105	0	0	0	0	0	0	0	2	0	0	2	2,107	70
Saudi Arabia	7,963	0	0	0	0	0	0	0	0	0	817	817	8,780	293
United Arab Emirates	1,065	0	0	0	0	0	0	0	0	0	0	0	1,065	35
Subtotal Arab OPEC	11,133	0	0	0	0	0	0	0	2	0	817	818	11,951	398
Other OPEC														
Ecuador	350	0	0	0	0	0	0	0	0	0	0	0	350	12
Gabon	1,157	0	0	0	0	0	0	0	0	0	0	0	1,157	39
Indonesia	1,043	470	0	0	0	0	0	0	0	0	0	470	1,513	50
Iran	525	0	0	0	0	0	0	0	0	0	0	0	525	18
Nigeria	6,295	0	0	0	0	0	0	0	182	1	0	183	6,478	216
Venezuela	3,697	0	0	488	0	0	0	0	234	216	348	1,286	4,984	166
Subtotal Other OPEC	13,067	470	0	488	0	0	0	0	416	216	348	1,939	15,006	500
Other														
Bahamas	0	0	882	0	0	0	0	0	0	0	0	882	882	29
Brazil	847	0	0	0	0	0	0	0	0	0	0	0	847	28
Canada	0	6	0	0	0	0	0	0	0	0	0	6	6	(s)
Egypt	950	0	0	0	0	0	0	0	0	0	0	0	950	32
France	0	0	0	0	0	0	0	0	0	(s)	0	(s)	(s)	(s)
Mexico	16,536	691	0	0	(s)	0	0	10	0	4	3	708	17,244	575
Netherlands	0	0	0	0	0	0	0	0	0	41	0	41	41	1
Norway	1,267	0	0	0	0	0	0	0	0	0	0	0	1,267	42
Oman	432	0	0	0	0	0	0	0	0	0	0	0	432	14
People's Republic of China	591	0	0	0	0	0	0	0	0	0	0	0	591	20
Puerto Rico	0	0	225	0	0	0	0	0	0	0	226	450	450	15
Trinidad and Tobago	1,856	0	0	0	0	0	0	0	404	0	16	419	2,275	76
United Kingdom	9,495	0	0	0	0	0	0	0	0	0	0	0	9,495	317
Virgin Islands	0	0	1,178	0	0	0	0	0	0	0	0	1,178	1,178	39

See footnotes at end of table.

Table 21. Imports of Crude Oil and Petroleum Products by Source and PAD District, November 1982
(continued)

Source	Crude Oil 1	LPG and Ethane	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
PAD District III														
Other														
Other Western Hemisphere	139	0	0	26	0	0	0	319	283	75	0	704	843	28
Other Eastern Hemisphere	1,135	0	609	0	0	0	0	0	561	97	21	1,288	2,423	81
Subtotal Other	33,247	697	2,893	26	(s)	0	0	330	1,248	217	266	5,677	38,924	1,297
Total Imports	57,447	1,167	2,893	514	(s)	0	0	330	1,666	433	1,431	8,435	65,882	2,196
PAD District IV														
Other														
Canada	1,738	570	0	0	0	0	0	0	0	1	52	623	2,361	79
Subtotal Other	1,738	570	0	0	0	0	0	0	0	1	52	623	2,361	79
Total Imports	1,738	570	0	0	0	0	0	0	0	1	52	623	2,361	79
PAD District V														
Arab OPEC														
Saudi Arabia	0	0	0	236	0	0	0	0	0	0	0	236	236	8
Subtotal Arab OPEC	0	0	0	236	0	0	0	0	0	0	0	236	236	8
Other OPEC														
Indonesia	4,789	0	0	0	80	0	0	1	30	0	0	111	4,900	163
Subtotal Other OPEC	4,789	0	0	0	80	0	0	1	30	0	0	111	4,900	163
Other														
Brunei	217	0	0	0	0	0	0	0	0	0	0	0	217	7
Canada	775	627	0	0	0	0	(s)	66	21	15	(s)	730	1,505	50
Mexico	0	0	0	0	0	0	0	11	0	0	5	16	16	1
People's Republic of China	0	0	0	0	981	0	0	11	0	0	0	992	992	33
Other Eastern Hemisphere	0	(s)	0	0	154	0	0	80	285	0	22	541	541	18
Subtotal Other	992	627	0	0	1,135	0	(s)	168	306	15	27	2,279	3,271	109
Total Imports	5,781	627	0	236	1,215	0	(s)	169	337	15	27	2,626	8,407	280

1 Includes crude oil imported for storage in the Strategic Petroleum Reserve.

2 Includes aviation gasoline, waxes, asphalt, lubricants, natural gasoline, isopentane, plant condensate, naphthas less than 400 degrees F, other oils greater than 400 degrees F and miscellaneous products.

(s) Less than 500 barrels or less than 500 barrels per day.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 22. Exports of Crude Oil and Petroleum Products by PAD District, November 1982
(Thousands of Barrels)

Commodity	Petroleum Administration for Defense Districts				
	I	II	III	IV	V
Total					
Crude Oil (including lease condensate) ¹	0	1,207	0	0	6,652
Liquefied Petroleum Gases and Ethane	40	8	926	0	141
Ethane	0	0	(s)	0	0
Propane	18	3	391	0	57
Butane	22	5	535	0	84
Butane-Propane Mixtures	0	0	0	0	0
Finished Motor Gasoline	(s)	51	280	0	12
Naphtha-Type Jet Fuel	(s)	0	0	0	0
Kerosene-Type Jet Fuel	0	0	245	0	23
Kerosene	(s)	(s)	0	0	(s)
Distillate Fuel Oil	1	(s)	304	0	410
Residual Fuel Oil	1	0	2,127	0	715
Naphtha < 400 Deg. for Petrochem. Feedstock	47	6	16	0	5,475
Other Oils > 400 Deg. for Petrochem. Feedstock	0	29	493	(s)	1
Special Naphthas	5	1	35	0	(s)
Lubricants	107	12	219	0	1
Wax	5	(s)	8	(s)	56
Petroleum Coke	3	522	3,486	0	395
Asphalt	4	1	(s)	1	5
Miscellaneous Products	17	(s)	15	(s)	2,705
Total Product Exports	231	629	8,154	2	6,708
Total Exports	231	1,836	8,154	2	13,360
					23,582

¹ Exports of crude oil are prohibited under normal circumstances. Some crude oil is shipped to Canada in exchange on a barrel-for-barrel basis. Shipments of crude oil to Puerto Rico and the Virgin Islands are not prohibited because these territories are U.S. possessions.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 23. Exports of Crude Oil and Petroleum Products by Destination, November 1982
(Thousands of Barrels)

Destination	Crude Oil 1	LPG and Ethane	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubricants	Wax	Petroleum Coke	Asphalt	Other	Total	Total (Daily Average)
Argentina	0	84	0	0	0	0	(s)	12	(s)	0	(s)	(s)	97	3
Australia	0	2	(s)	0	0	0	10	23	(s)	52	(s)	4	91	3
Bahamas	0	7	(s)	0	(s)	194	(s)	2	0	0	0	(s)	203	7
Bahrain	0	0	0	0	0	0	0	(s)	0	61	0	0	61	2
Belgium & Luxembourg	0	1	0	0	0	0	4	16	(s)	1,235	(s)	1	1,258	42
Brazil	0	80	0	0	0	0	0	(s)	(s)	19	0	1	100	3
Cameroon	0	0	0	0	0	0	0	0	0	30	0	0	30	1
Canada	1,207	13	51	0	(s)	323	3	47	2	663	5	51	2,365	79
Chile	0	1	0	0	0	0	(s)	17	(s)	(s)	(s)	(s)	19	1
China (Taiwan)	0	(s)	0	0	0	0	4	12	(s)	(s)	0	(s)	17	1
Colombia	0	0	0	0	0	0	2	2	(s)	0	0	4	9	(s)
Costa Rica	0	10	0	0	0	0	(s)	3	0	0	(s)	(s)	13	(s)
Denmark	0	1	0	0	0	0	0	(s)	0	0	0	(s)	2	(s)
Dominican Republic	0	0	0	0	0	0	0	(s)	0	0	0	(s)	3	(s)
Ecuador	0	0	0	0	0	0	0	1	(s)	0	0	2	3	(s)
Egypt	0	1	0	0	0	0	0	1	(s)	0	0	0	2	(s)
El Salvador	0	(s)	0	0	0	0	(s)	2	(s)	0	0	(s)	2	(s)
Finland	0	0	0	0	0	0	0	(s)	(s)	0	0	1	1	(s)
France	0	2	0	0	0	0	0	1	1	245	0	67	315	10
French Pacific Isl	0	0	0	0	29	13	0	(s)	0	0	0	0	42	1
Ghana	0	0	0	0	0	0	0	(s)	0	33	0	(s)	33	1
Greece	0	(s)	0	0	0	0	0	(s)	0	0	0	1	2	(s)
Guatemala	0	(s)	0	0	0	0	(s)	2	3	0	0	(s)	5	(s)
Guinea	0	0	0	0	0	0	0	(s)	0	0	0	0	9	(s)
Honduras	0	0	0	0	0	0	1	7	(s)	0	0	(s)	7	(s)
Hong Kong	0	5	0	0	0	0	0	2	(s)	0	(s)	(s)	9	(s)
India	0	(s)	0	(s)	0	0	(s)	16	0	91	0	7	107	4
Indonesia	0	0	0	0	0	0	0	2	0	0	0	0	0	0
Iran	0	0	0	0	0	0	(s)	2	(s)	(s)	0	5	8	(s)
Israel	0	(s)	0	0	0	0	0	4	(s)	499	0	2	828	28
Italy	0	81	0	245	0	0	0	(s)	(s)	0	0	0	4	(s)
Ivory Coast	0	10	0	0	0	0	(s)	2	0	0	0	0	13	(s)
Jamaica	0	0	0	0	178	944	5	7	2	2,115	(s)	4	3,254	108
Japan	0	(s)	0	0	0	0	0	2	0	0	0	2	2	(s)
Jordan	0	0	0	0	204	1,198	(s)	2	(s)	(s)	(s)	2	1,413	47
Korea, Republic of	0	7	0	0	0	0	(s)	(s)	0	0	0	(s)	1	(s)
Kuwait	0	0	0	0	0	0	(s)	(s)	0	0	0	(s)	(s)	(s)
Lebanon	0	0	0	0	0	0	0	(s)	0	0	0	(s)	(s)	(s)
Libena	0	0	0	0	0	0	0	(s)	0	0	0	(s)	(s)	(s)
Malaysia	0	0	0	0	0	0	1	4	0	0	0	(s)	1	(s)
Mexico	0	557	261	23	(s)	0	1	19	1	14	0	2	864	29
Netherlands	0	27	0	0	303	394	0	1	(s)	569	0	176	1,489	50
Netherlands Antilles	0	0	0	0	0	1,223	(s)	5	0	0	0	0	1,224	41
New Zealand	0	0	0	0	0	0	0	(s)	0	0	0	4	10	(s)
Nicaragua	0	0	0	0	0	0	0	41	0	0	0	0	(s)	(s)
Nigeria	0	0	0	0	0	0	0	4	0	28	(s)	2	43	1
Norway	0	(s)	0	0	0	0	0	(s)	0	0	0	(s)	32	1
Pacific Trust Terr.	0	0	0	0	0	0	0	6	(s)	0	0	(s)	51	1
Panama	0	45	0	0	0	0	(s)	23	0	(s)	0	1	24	2
Peru	0	0	0	0	(s)	0	(s)	3	(s)	0	0	1	4	1
Philippines	0	0	0	0	0	0	(s)	3	(s)	0	(s)	1	4	(s)

See footnotes at end of table

Table 23. Exports of Crude Oil and Petroleum Products by Destination, November 1982
(Thousands of Barrels)

Destination	Crude Oil 1	LPG and Ethane	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubricants	Wax	Petroleum Coke	Asphalt	Other	Total	Total (Daily Average)
Puerto Rico	2,521	11	0	0	0	333	2	10	1	40	(s)	5	2,923	97
Rep. of South Africa	0	1	0	0	0	0	0	12	4	49	(s)	3	69	2
Saudi Arabia	0	1	0	0	(s)	0	(s)	21	0	0	(s)	3	25	1
Singapore	0	0	0	0	0	851	1	2	(s)	0	(s)	1	856	29
Spain	0	118	0	0	0	0	(s)	1	(s)	598	0	193	910	30
Sumnam	0	0	0	0	0	0	0	(s)	0	10	0	(s)	10	(s)
Sweden	0	0	0	0	0	0	0	2	(s)	(s)	0	2	4	(s)
Switzerland	0	2	0	0	0	0	0	1	(s)	(s)	0	0	3	1
Thailand	0	1	30	0	0	0	0	1	(s)	0	0	(s)	24	1
Trinidad and Tobago	0	23	0	0	0	0	0	1	(s)	28	0	(s)	29	1
Turkey	0	0	0	0	0	0	(s)	1	0	58	0	(s)	59	2
United Arab Emirates	0	(s)	0	0	0	0	4	4	(s)	0	0	37	45	2
United Kingdom	0	0	0	0	0	0	0	33	0	149	0	9	191	6
U.S.S.R.	0	0	0	0	0	0	0	(s)	0	0	0	(s)	(s)	(s)
Uruguay	0	0	0	0	0	0	2	1	(s)	(s)	0	1	6	(s)
Venezuela	0	(s)	0	0	0	0	0	(s)	0	0	0	0	3,586	120
Virgin Islands	3,585	1	0	0	0	0	0	(s)	3	84	0	28	116	4
West Germany	0	1	0	0	0	0	(s)	0	1	45	0	0	45	1
Yugoslavia	0	0	0	0	0	0	0	(s)	7	0	1	4	578	19
Other	546	19	(s)	0	1	(s)	(s)	41	(s)	0	0	1	4	1
Total	7,859	1,115	343	269	715	5,475	41	395	18	6,716	8	630	23,582	786

1 Exports of crude oil are prohibited under normal circumstances. Some crude oil is shipped to Canada in exchange, on a barrel-for-barrel basis. Shipments of crude oil to Puerto Rico and the Virgin Islands are not prohibited because these territories are U.S. possessions.

(s) Less than 500 barrels or less than 500 barrels per day.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, November 30, 1982
(Thousands of Barrels)

Commodity	PAD District I			PAD District II				PAD District III			PAD		United States				
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico		Total	Dist. IV Rocky Mt.	Dist. V West Coast	
Crude Oil (Incl. lease condensate)¹																	
Refinery	--	--	15,792	--	--	--	--	15,104	--	--	--	--	--	48,947	1,559	26,400	107,802
Tank Farms and Pipelines	--	--	2,872	--	--	--	--	61,055	--	--	--	--	--	98,474	9,914	30,161	202,476
Leases	--	--	60	--	--	--	--	1,585	--	--	--	--	--	16,778	1,412	1,726	21,561
Strategic Petroleum Reserve ²	--	--	0	--	--	--	--	0	--	--	--	--	--	289,963	0	0	289,963
Alaskan In-Transit	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	24,188	24,188
Total	--	--	18,724	--	--	--	--	77,744	--	--	--	--	--	454,162	12,885	82,475	645,990
Petroleum Products																	
Refinery	45,259	3,362	48,621	981	42,995	5,487	20,497	69,960	10,136	77,521	48,546	5,684	1,273	143,160	12,477	63,319	337,537
Bulk Terminal	148,694	8,188	156,882	3,912	40,297	8,512	11,175	63,896	5,359	34,720	7,066	4,147	471	51,763	2,795	19,312	294,648
Pipeline	28,527	2,929	31,456	1,423	12,367	3,587	17,240	34,617	8,008	7,576	7,072	14,548	1,018	38,222	2,627	4,201	111,123
Natural Gas Processing Plant	469	686	1,155	0	2,422	151	16,488	19,061	5,818	22,920	10,796	3,889	896	44,318	373	899	65,808
Total	222,949	15,165	238,114	6,316	98,081	17,737	65,400	187,534	29,321	142,737	73,480	28,268	3,658	277,463	18,272	87,731	809,116
Natural Gasoline and Isopentane																	
Refinery	5	0	5	0	24	52	115	191	54	153	135	1	13	356	9	25	586
Pipeline	0	0	0	0	77	15	310	402	211	82	0	60	80	433	182	5	1,022
Natural Gas Processing Plant	5	27	32	0	25	13	1,212	1,250	382	2,414	508	23	33	3,360	51	25	4,718
Total	10	27	37	0	126	80	1,637	1,843	647	2,649	643	84	126	4,149	242	55	6,326
Unfractionated Stream																	
Pipeline	0	0	0	0	78	0	23	101	0	28	28	0	0	56	0	0	157
Natural Gas Processing Plant	0	0	0	0	96	2	2,300	2,397	307	1,302	61	2	156	1,827	31	2	4,257
Total	0	0	0	0	174	2	2,323	2,498	307	1,330	89	2	156	1,883	31	2	4,414
Plant Condensate																	
Refinery	0	0	0	0	6	0	0	6	10	75	0	96	0	181	0	0	187
Pipeline	0	0	0	0	0	0	0	0	866	365	49	8	17	1,305	0	0	1,305
Natural Gas Processing Plant	0	0	0	0	2	0	5	7	36	34	6	10	1	87	59	0	153
Total	0	0	0	0	8	0	5	13	912	474	55	114	18	1,573	59	0	1,645
Ethane																	
Refinery	0	0	0	0	9	0	0	9	0	409	0	0	0	409	0	0	418
Bulk Terminal	0	0	0	0	80	0	40	120	0	727	0	0	0	727	0	0	847
Pipeline	0	0	0	0	42	972	159	1,173	177	78	114	0	3	372	0	0	1,545
Natural Gas Processing Plant	0	0	0	0	24	0	433	458	361	1,363	413	1	0	2,138	(s)	0	2,596
Total	0	0	0	0	155	972	632	1,760	538	2,577	527	1	3	3,646	(s)	0	5,406
Propane for Petrochemical Feedstock Use																	
Refinery	72	0	72	0	72	0	1	73	0	8	399	0	0	407	0	0	552
Total	72	0	72	0	72	0	1	73	0	8	399	0	0	407	0	0	552
Propane for Other Uses																	
Refinery	560	4	564	3	1,070	17	246	1,336	77	766	909	3	4	1,759	173	218	4,050
Bulk Terminal	586	0	586	0	1,086	71	435	1,592	167	11,555	6	43	0	11,771	37	0	13,986
Pipeline	857	1,677	2,534	61	1,106	217	1,900	3,284	493	80	245	885	151	1,854	114	0	7,786
Natural Gas Processing Plant	438	653	1,091	0	2,158	119	9,149	11,426	3,068	5,756	5,787	3,567	289	18,466	165	347	31,496
Total	2,441	2,334	4,775	64	5,420	424	11,730	17,638	3,805	18,157	6,947	4,498	444	33,850	489	565	57,318

See footnotes at end of table.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, November 30, 1982
(Thousands of Barrels) (continued)

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico		Total	Dist. IV Rocky Mt.	Dist. V West Coast
Butane for Petro. Feed. Use																
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Butane for Other Uses																
Refinery	99	0	99	261	273	49	181	764	121	329	1,109	2	3	1,564	163	622
Bulk Terminal	262	0	262	0	402	0	71	473	109	3,365	0	0	0	3,474	0	0
Pipeline	30	126	156	0	922	15	264	1,201	882	95	5	163	75	1,220	130	0
Natural Gas Processing Plant	17	5	22	0	66	14	849	929	1,004	4,202	2,699	137	91	8,134	42	491
Total	408	131	539	261	1,663	78	1,365	3,367	2,116	7,991	3,813	302	169	14,392	335	1,113
Butane-Propane Mixtures for Petro. Feed. Use																
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Butane-Propane Mixtures for Other Uses																
Refinery	0	0	0	0	0	0	0	0	1	16	55	0	19	91	4	278
Bulk Terminal	0	0	0	0	196	0	0	196	0	1	0	0	0	1	0	0
Pipeline	0	0	0	0	0	0	20	20	614	45	14	0	1	674	0	0
Natural Gas Processing Plant	0	0	0	0	3	0	83	86	32	7	(s)	2	0	41	0	4
Total	0	0	0	0	199	0	103	302	647	69	69	2	20	807	4	282
Ethane-Propane Mixtures																
Bulk Terminal	0	0	0	0	0	0	1	1	255	1,552	0	0	0	1,807	0	0
Pipeline	0	0	0	0	66	0	464	530	510	59	2	0	118	689	125	0
Natural Gas Processing Plant	0	0	0	0	0	0	1,174	1,174	240	4,833	0	0	256	5,329	0	0
Total	0	0	0	0	66	0	1,639	1,705	1,005	6,444	2	0	374	7,825	125	0
Isobutane																
Refinery	9	9	18	18	88	13	152	271	102	254	557	10	7	930	29	12
Bulk Terminal	0	0	0	0	72	0	8	80	99	1,888	0	0	0	1,987	0	0
Pipeline	0	0	0	0	459	0	94	553	177	10	0	50	49	286	36	0
Natural Gas Processing Plant	1	2	3	0	45	4	1,281	1,330	154	2,187	1,321	54	68	3,784	1	30
Total	10	11	21	18	664	17	1,535	2,234	532	4,339	1,878	114	124	6,987	66	42
Other Hydrocarbons and Alcohol																
Refinery	0	15	15	0	88	0	0	88	1	70	37	0	0	108	0	0
Total	0	15	15	0	88	0	0	88	1	70	37	0	0	108	0	0
Unfinished Oils																
Refinery	3,521	308	3,829	46	2,455	137	1,280	3,918	901	6,200	3,951	184	97	11,333	492	5,848
Naphtha and Lighter	1,662	9	1,671	0	2,252	10	1,138	3,400	328	7,204	1,140	100	3	8,775	252	3,635
Kerosene and Lighter Gas Oils	7,079	481	7,560	99	5,837	297	1,850	8,083	817	12,415	6,787	800	148	20,967	1,261	10,222
Heavy Gas Oils	1,518	257	1,775	2	3,084	43	1,461	4,590	522	3,793	3,492	27	0	7,834	728	5,506
Residuum	13,780	1,055	14,835	147	13,628	487	5,729	19,991	2,568	29,612	15,370	1,111	248	48,909	2,733	25,211
Total	35,560	2,010	37,570	392	30,256	968	12,568	67,929	13,636	101,404	35,712	1,122	1,496	184,819	10,222	64,193

See footnotes at end of table.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, November 30, 1982
(Thousands of Barrels) (continued)

Commodity	PAD District I				PAD District II				PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Rocky Mt.	Dist. V West Coast
Motor Gasoline Blending Components																	
Refinery	4,578	118	4,696	34	5,423	592	1,684	7,733	1,342	8,528	7,182	133	149	17,334	1,886	8,130	39,779
Bulk Terminal	294	0	294	5	133	1	49	188	53	45	0	0	0	98	0	93	673
Pipeline	0	0	0	0	0	2	215	217	12	0	0	0	0	12	0	0	229
Total	4,872	118	4,990	39	5,556	595	1,948	8,138	1,407	8,573	7,182	133	149	17,444	1,886	8,223	40,681
Aviation Gasoline Blending Components																	
Refinery	0	0	0	0	97	0	7	104	36	25	148	0	0	209	0	38	351
Total	0	0	0	0	97	0	7	104	36	25	148	0	0	209	0	38	351
Total Finished Motor Gasoline																	
Refinery	5,271	266	5,537	100	5,637	1,450	4,137	11,324	2,450	8,368	5,216	1,030	170	17,234	2,339	7,098	43,532
Bulk Terminal	36,433	3,597	40,030	1,780	17,422	3,772	5,274	28,248	2,538	5,367	1,815	2,526	292	12,538	1,706	9,533	92,055
Pipeline	14,940	651	15,591	734	6,911	1,200	7,466	16,311	2,403	3,738	4,344	7,601	188	18,274	1,208	2,359	53,743
Natural Gas Processing Plant	8	0	8	0	0	0	0	0	0	0	0	0	0	0	23	0	32
Total Finished Motor Gasoline	56,652	4,514	61,166	2,614	29,970	6,422	16,877	55,883	7,391	17,473	11,375	11,157	650	48,046	5,276	18,990	189,362
Finished Leaded Motor Gasoline																	
Refinery	2,530	145	2,675	56	2,535	900	2,433	5,924	1,349	3,898	2,699	816	79	8,841	1,457	3,045	21,942
Bulk Terminal	17,711	1,616	19,327	876	8,533	2,245	3,456	15,110	1,297	2,759	838	1,285	169	6,348	1,020	5,181	46,986
Pipeline	6,428	342	6,770	348	3,000	736	4,643	8,727	1,556	2,277	1,604	3,736	112	9,285	781	1,160	26,723
Natural Gas Processing Plant	8	0	8	0	0	0	0	0	0	0	0	0	0	0	18	0	27
Total	26,677	2,103	28,780	1,280	14,068	3,881	10,532	29,761	4,202	8,934	5,141	5,837	360	24,474	3,276	9,386	95,678
Finished Unleaded Motor Gasoline																	
Refinery	2,741	121	2,862	44	3,102	550	1,704	5,400	1,101	4,470	2,517	214	91	8,393	881	4,047	21,583
Bulk Terminal	18,715	1,981	20,696	904	8,854	1,527	1,817	13,102	1,241	2,608	977	1,241	123	6,190	686	4,352	45,026
Pipeline	8,512	309	8,821	386	3,911	463	2,823	7,583	847	1,461	2,740	3,865	76	8,989	427	1,199	27,019
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
Total	29,968	2,411	32,379	1,334	15,867	2,540	6,344	26,085	3,189	8,539	6,234	5,320	290	23,572	1,999	9,598	93,633
Gasohol																	
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	7
Bulk Terminal	7	0	7	0	35	0	1	36	0	0	0	0	0	0	0	0	43
Pipeline	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	7	0	7	0	35	1	1	37	0	0	0	0	0	0	1	6	51
Finished Aviation Gasoline																	
Refinery	24	0	24	0	103	0	39	142	22	330	140	0	0	492	36	239	933
Bulk Terminal	433	41	474	17	257	44	65	383	45	22	4	30	58	159	19	427	1,462
Pipeline	18	0	18	0	11	0	31	42	0	0	0	0	0	0	0	0	60
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	65	0	0	0	0	65	0	0	65
Total	475	41	516	17	371	44	135	567	132	352	144	30	58	716	55	666	2,520
Naphtha-Type Jet Fuel																	
Refinery	129	39	168	0	472	67	273	812	271	729	341	218	157	1,716	251	1,021	3,968
Bulk Terminal	7	10	17	26	174	37	108	345	171	64	0	45	0	280	8	120	770
Pipeline	185	0	185	22	0	58	91	171	171	0	52	92	235	550	87	304	1,297
Total	321	49	370	48	646	162	472	1,328	613	793	393	355	392	2,546	346	1,445	6,035

See footnotes at end of table.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, November 30, 1982
(Thousands of Barrels) (continued)

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico		Total	Rocky Mt.	Dist. V West Coast
Kerosene-Type Jet Fuel																
Refinery	1,316	0	1,316	39	1,301	52	188	1,580	322	2,489	2,483	1	29	5,324	352	3,204
Bulk Terminal	5,665	153	5,818	63	2,500	316	542	3,421	199	1,683	81	41	20	2,024	156	1,917
Pipeline	2,784	156	2,940	109	515	115	1,335	2,074	781	1,219	489	1,326	19	3,834	115	9,396
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	(s)	0	(s)	0	(s)
Total	9,765	309	10,074	211	4,316	483	2,065	7,075	1,302	5,391	3,053	1,368	68	11,182	623	34,508
Kerosene																
Refinery	375	46	421	0	694	29	195	918	45	1,001	591	19	59	1,715	7	82
Bulk Terminal	4,284	313	4,597	271	1,315	71	13	1,670	15	420	44	26	0	505	27	40
Pipeline	733	13	746	59	116	0	32	207	17	91	152	146	0	406	0	1
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	2	0	0	0	1	3	0	3
Total	5,392	372	5,764	330	2,125	100	240	2,795	79	1,512	787	191	60	2,629	34	11,345
Total Distillate Fuel Oils																
Refinery	9,985	368	10,353	49	8,030	1,811	4,497	14,387	1,319	9,888	5,885	1,314	256	18,662	2,040	5,532
Bulk Terminal	66,177	2,875	69,052	1,344	13,775	3,668	3,751	22,538	1,395	5,619	1,608	1,235	99	9,956	839	4,668
Pipeline	8,980	306	9,286	438	2,064	993	4,836	8,331	684	1,678	1,578	4,217	82	8,239	630	1,077
Natural Gas Processing Plant	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0	2
Total Distillate Fuel Oil	85,142	3,549	88,691	1,831	23,869	6,472	13,085	45,257	3,399	17,185	9,071	6,766	437	36,858	3,509	11,277
Dist. Fuel Oils Less No. 4 Fuel Oil																
Refinery	9,985	364	10,349	49	8,002	1,811	4,497	14,359	1,275	9,658	5,630	1,242	189	17,994	2,039	5,487
Bulk Terminal	64,282	2,872	67,154	1,335	13,747	3,668	3,751	22,501	1,343	5,619	1,607	1,235	99	9,903	839	4,632
Pipeline	8,980	306	9,286	438	2,064	993	4,836	8,331	684	1,678	1,578	4,217	82	8,239	630	1,077
Natural Gas Processing Plant	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0	2
Total	83,247	3,542	86,789	1,822	23,813	6,472	13,085	45,192	3,303	16,955	8,815	6,694	370	36,137	3,508	11,196
No. 4 Fuel Oil																
Refinery	0	4	4	0	28	0	0	28	44	230	255	72	67	668	1	45
Bulk Terminal	1,895	3	1,898	9	28	0	0	37	52	0	0	1	0	53	0	36
Total	1,895	7	1,902	9	56	0	0	65	96	230	256	72	67	721	1	81
Residual Fuel Oils																
Refinery	4,289	122	4,411	110	2,129	295	154	2,688	410	5,511	4,136	281	56	10,394	513	6,654
Bulk Terminal	31,357	601	31,958	216	1,294	149	649	2,308	309	2,279	3,133	25	0	5,746	0	1,736
Pipeline	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	23
Total	35,646	723	36,369	326	3,423	444	803	4,996	719	7,791	7,269	306	56	16,141	513	8,412
Naphtha < 400 Deg. Petro. Feedstock																
Refinery	193	0	193	0	57	0	68	125	132	953	276	6	0	1,367	0	315
Total	193	0	193	0	57	0	68	125	132	953	276	6	0	1,367	0	315
Other Oils > 400 Deg. Petro. Feedstock																
Refinery	5	0	5	0	135	0	1	136	200	1,166	272	32	0	1,670	0	383
Total	5	0	5	0	135	0	1	136	200	1,166	272	32	0	1,670	0	383

See footnotes at end of table.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, November 30, 1982
(Thousands of Barrels) (continued)

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	Dist. V West Coast
Special Naphthas																
Refinery	48	45	93	0	245	0	190	435	35	1,256	70	121	0	1,482	8	196
Bulk Terminal	722	25	747	36	184	7	0	227	0	120	0	19	0	139	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	133	0	0	0	0	133	0	0
Total	770	70	840	36	429	7	190	662	168	1,376	70	140	0	1,754	8	196
Lubricants																
Refinery	77	454	531	0	45	0	44	89	0	251	83	0	0	334	2	44
Bright Stock	525	437	962	0	593	0	447	1,040	0	1,859	1,042	79	0	2,980	57	521
Neutral	658	147	805	0	157	0	126	283	39	2,042	286	184	0	2,551	7	101
Other	825	190	1,015	12	432	16	54	514	4	13	197	68	2	284	3	525
Bulk Terminals	2,085	1,228	3,313	12	1,227	16	671	1,926	43	4,165	1,608	331	2	6,149	69	1,191
Total																12,648
Wax, Microcrystalline																
Refinery	3	37	40	0	0	0	14	14	28	28	10	1	0	67	0	0
Total	3	37	40	0	0	0	14	14	28	28	10	1	0	67	0	121
Wax, Crystalline—Fully Refined																
Refinery	10	45	55	0	20	0	27	47	0	83	175	0	0	258	10	34
Total	10	45	55	0	20	0	27	47	0	83	175	0	0	258	10	34
Wax, Crystalline—Other																
Refinery	6	74	80	0	0	0	7	7	0	131	0	0	0	131	0	11
Total	6	74	80	0	0	0	7	7	0	131	0	0	0	131	0	229
Petroleum Coke																
Refinery	1,174	0	1,174	0	830	63	1,140	2,033	0	146	438	218	0	802	713	1,971
Total	1,174	0	1,174	0	830	63	1,140	2,033	0	146	438	218	0	802	713	1,971
Asphalt																
Refinery	1,735	27	1,762	219	1,678	479	822	3,198	503	580	898	754	103	2,838	1,144	1,191
Bulk Terminal	1,623	383	2,006	142	961	357	113	1,573	0	0	166	73	0	239	0	140
Total	3,358	410	3,768	361	2,639	836	935	4,771	503	580	1,064	827	103	3,077	1,144	1,331
Road Oil																
Refinery	0	0	0	0	20	0	0	20	0	0	0	1	0	1	0	33
Total	0	0	0	0	20	0	0	20	0	0	0	1	0	1	0	33
Miscellaneous Products																
Refinery	333	54	387	1	71	14	13	99	48	440	303	66	0	857	1	202
Bulk Terminal	26	0	26	0	14	3	2	19	0	0	12	16	0	28	0	113
Pipeline	0	0	0	0	0	0	0	0	10	0	7	0	0	17	0	17
Natural Gas Processing Plant	0	0	0	0	4	0	(s)	4	32	824	1	93	(s)	950	1	0
Total	359	54	413	1	89	17	15	122	90	1,271	316	175	(s)	1,852	2	315
Total Stocks, All Oils	--	--	256,838	--	--	--	--	265,278	--	--	--	--	--	731,625	31,157	170,255
																1,455,155

1 Crude oil data are not collected by refinery district.

2 Includes 33799 thousands of barrels of domestic crude oil.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

-- Not Applicable.

Table 25. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, November 1982
(Thousands of Barrels)

Commodity	From I to			From II to			From III to			From IV to			From V to				
	II	III	V	I	III	IV	V	I	II	IV	V	II	III	V	I	II	III
Crude Oil	0	0	0	0	0	0	0	405	1,574	0	0	0	0	0	1,554	0	18,248
Petroleum Products	8,700	528	0	3,504	5,630	2,481	0	94,337	24,933	0	2,426	1,296	81	1,323	0	0	48
Natural Gasoline and Isopentane	0	0	0	0	329	0	0	0	1,212	0	0	352	14	0	0	0	0
Unfractionated Stream	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plant Condensate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Liquefied Petroleum Gases	0	23	0	1,018	1,738	148	0	1,686	5,799	0	0	114	67	0	0	0	0
Unfinished Oils	0	351	0	0	0	0	0	1,314	0	0	0	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0	0	749	0	0	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	5,544	0	0	1,527	2,029	1,552	0	49,165	11,592	0	973	486	0	861	0	0	0
Finished Leaded Motor Gasoline	3,049	0	0	619	1,132	876	0	22,641	5,649	0	569	366	0	671	0	0	0
Finished Unleaded Motor Gasoline	2,495	0	0	908	897	676	0	26,524	5,943	0	404	120	0	190	0	0	0
Gasohol	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Aviation Gasoline	10	0	0	0	0	9	0	168	120	0	0	0	0	0	0	0	0
Naphtha-Type Jet Fuel	172	0	0	0	68	0	0	715	0	0	221	85	0	107	0	0	0
Kerosene-Type Jet Fuel	233	0	0	126	52	633	0	10,549	2,104	0	177	4	0	51	0	0	0
Kerosene	87	0	0	0	0	0	0	1,310	59	0	0	0	0	0	0	0	0
Distillate Fuel Oil	2,479	0	0	366	891	139	0	24,902	2,311	0	370	255	0	304	0	0	0
Distillate Fuel Oil Less No. 4	2,479	0	0	366	746	139	0	24,559	2,311	0	370	255	0	304	0	0	0
No. 4 Fuel Oil	0	0	0	0	145	0	0	343	0	0	0	0	0	0	0	0	0
Residual Fuel Oil	0	0	0	178	457	0	0	2,681	152	0	475	0	0	0	0	0	0
Naphtha and Other Oils for Petro. Feedstock	14	0	0	9	23	0	0	54	65	0	0	0	0	0	0	0	10
Special Naphthas	0	0	0	8	0	0	0	195	114	0	0	0	0	0	0	0	0
Lubricants	141	35	0	18	43	0	0	488	240	0	207	0	0	0	0	0	25
Wax	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	0	102	0	182	0	0	0	310	289	0	0	0	0	0	0	0	0
Miscellaneous Products	20	17	0	72	0	0	0	787	127	0	3	0	0	0	0	0	13
Total All Products	8,700	528	0	3,504	5,630	2,481	0	94,742	26,507	0	2,426	1,296	81	1,323	1,654	0	18,296

Note: Total may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.

Table 26. Movements of Petroleum Products by Pipeline Between PAD Districts, November 1982
(Thousands of Barrels)

Commodity	From I to		From II to				From III to				From IV to			
	II	I	I	III	IV	I	II	III	IV	V	II	III	IV	V
Natural Gasoline and Isopentane	0	0	0	329	0	0	0	1,212	0	0	352	14	0	0
Unfractionated Stream	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plant Condensate	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Liquefied Petroleum Gases	0	1,018	1,738	148	0	1,463	5,799	0	0	0	114	67	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	749	0	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	4,268	1,295	2,009	1,552	37,539	10,907	0	973	486	0	861	0	0	0
Finished Leaded Motor Gasoline	2,323	534	1,112	876	17,760	5,312	0	569	366	0	671	0	0	0
Finished Unleaded Motor Gasoline	1,945	761	897	676	19,779	5,595	0	404	120	0	190	0	0	0
Gasohol	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Aviation Gasoline	10	0	0	9	28	87	0	0	0	0	0	0	0	0
Naphtha-Type Jet Fuel	143	119	52	633	6,840	1,833	0	221	85	0	107	0	0	0
Kerosene-Type Jet Fuel	54	0	0	0	836	59	0	177	4	0	51	0	0	0
Kerosene	1,673	327	746	139	19,826	1,804	0	370	255	0	304	0	0	0
Distillate Fuel Oil	1,673	327	746	139	19,826	1,804	0	370	255	0	304	0	0	0
Distillate Fuel Oil Less No. 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No. 4 Fuel Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Residual Fuel Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Products	0	72	0	0	0	32	0	0	0	0	0	0	0	0
Total	6,148	2,831	4,942	2,481	66,788	22,482	0	1,741	1,296	81	1,323	0	0	0

Note: Total may not equal sum of components due to independent rounding.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 27. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, November 1982
(Thousands of Barrels)

Commodity	From I to			From II to			From III to				From V to			
	II	III	V	I	III	V	New Eng	Cent Atl	Low Atl	II	I	II	III	
Crude Oil	0	0	0	0	0	0	405	0	405	0	1,574	0	1,654	0 18,248
Petroleum Products	2,552	528	0	673	688	0	27,549	3,350	7,068	17,131	2,451	685	0	0 48
Liquefied Petroleum Gases	0	23	0	0	0	0	223	0	0	223	0	0	0	0 0
Unfinished Oils	0	351	0	0	0	0	1,314	0	1,292	22	0	0	0	0 0
Finished Motor Gasoline	1,276	0	0	232	20	0	11,626	967	542	10,117	685	0	0	0 0
Finished Aviation Gasoline	0	0	0	0	0	0	140	14	42	84	33	0	0	0 0
Naphtha-Type Jet Fuel	172	0	0	0	0	0	459	264	195	264	0	0	0	0 0
Kerosene-Type Jet Fuel	90	0	0	7	0	0	3,709	229	958	2,522	271	0	0	0 0
Kerosene	33	0	0	0	0	0	474	0	243	231	0	0	0	0 0
Distillate Fuel Oil	806	0	0	39	145	0	5,076	1,258	1,491	2,327	507	0	0	0 0
Residual Fuel Oil	0	0	0	178	457	0	2,681	882	1,145	654	152	475	0	0 0
Naphtha and Other Oils for Petro. Feed. Use	14	0	0	9	23	0	54	0	22	32	65	0	0	0 10
Special Naphthas	141	0	0	8	0	0	195	0	76	119	114	0	0	0 0
Lubricants	0	35	0	18	43	0	488	0	384	104	240	207	0	0 25
Wax	0	0	0	0	0	0	13	0	13	0	0	0	0	0 0
Asphalt and Road Oil	0	102	0	182	0	0	310	9	301	289	0	0	0	0 0
Miscellaneous Products	20	17	0	0	0	0	787	0	656	131	95	3	0	0 13
Total	2,552	528	0	673	688	0	27,954	3,350	7,473	17,131	4,025	685	1,654	0 18,296

Note: Total may not equal sum of components due to independent rounding.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 28. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker and Barge Between PAD Districts, November 1982
(Thousands of Barrels)

Commodity	P.A.D. District I			P.A.D. District II			P.A.D. District III			P.A.D. District IV			P.A.D. District V		
	Receipts into PADD I	Shipments from PADD I	Net Receipts PADD I	Receipts into PADD II	Shipments from PADD II	Net Receipts PADD II	Receipts into PADD III	Shipments from PADD III	Net Receipts PADD III	Receipts into PADD IV	Shipments from PADD IV	Net Receipts PADD IV	Receipts into PADD V	Shipments from PADD V	Net Receipts PADD V
Crude Oil	2,059	0	2,059	1,574	0	1,574	18,248	1,979	16,269	0	0	0	0	19,902	-19,902
Petroleum Products	97,841	9,228	88,613	34,929	11,615	23,314	6,287	121,696	-115,409	2,481	2,700	-219	3,749	48	3,701
Natural Gasoline	0	0	0	1,564	329	1,235	343	1,212	-869	0	366	-366	0	0	0
Unfractionated Stream	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plant Condensate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Liquefied Petroleum Gases	2,704	23	2,681	5,913	2,904	3,009	1,828	7,485	-5,657	148	181	-33	0	0	0
Unfinished Oils	1,314	351	963	0	0	0	351	1,314	-963	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	749	0	749	0	749	-749	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	50,692	5,544	45,148	17,622	5,108	12,514	2,029	61,730	-59,701	1,552	1,347	205	1,834	0	1,834
Finished Leaded Motor Gasoline	23,260	3,049	20,211	9,064	2,627	6,437	1,132	28,859	-27,727	876	1,037	-161	1,240	0	1,240
Finished Unleaded Motor Gasoline	27,432	2,495	24,937	8,558	2,481	6,077	897	32,871	-31,974	676	310	366	594	0	594
Gasohol	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Aviation Gasoline	168	10	158	130	9	121	0	288	-288	9	9	9	0	0	0
Naphtha-Type Jet Fuel	715	172	543	257	68	189	68	936	-868	0	192	-192	328	0	328
Kerosene-Type Jet Fuel	10,675	233	10,442	2,341	811	1,530	52	12,830	-12,778	633	55	578	228	0	228
Kerosene	1,310	87	1,223	146	0	146	0	1,369	-1,369	0	0	0	0	0	0
Distillate Fuel Oil	25,268	2,479	22,789	5,045	1,396	3,649	891	27,583	-26,692	139	559	-420	674	0	674
Distillate Fuel Oil Less No. 4	24,925	2,479	22,446	5,045	1,251	3,794	746	27,240	-26,494	139	559	-420	674	0	674
No. 4 Fuel Oil	343	0	343	0	145	-145	145	343	-198	0	0	0	0	0	0
Residual Fuel Oil	2,859	0	2,859	152	635	-483	457	3,308	-2,851	0	0	0	475	0	475
Naphtha and Other Oils for Petro. Feedstock Use	63	14	49	79	32	47	33	119	-86	0	0	0	0	10	-10
Special Naphthas	203	0	203	114	8	106	0	309	-309	0	0	0	0	0	0
Lubricants	506	176	330	381	61	320	103	935	-832	0	0	0	207	25	182
Wax	13	0	13	0	0	0	0	13	-13	0	0	0	0	0	0
Asphalt and Road Oil	492	102	390	289	182	107	102	599	-497	0	0	0	0	0	0
Miscellaneous Products	859	37	822	147	72	75	30	917	-887	0	0	0	3	13	-10
Total All Products	99,900	9,228	90,672	36,503	11,615	24,888	24,535	123,675	-99,140	2,481	2,700	-219	3,749	19,950	-16,201

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 29. Production of No. 4 Fuel Oil and Residual Fuel Oil By Sulfur Content, November 1982
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III					Total	PAD Dist. IV Rocky Mt.	United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico					
																West Coast	Dist. V	
No. 4 Fuel Oil	0	2	2	0	33	0	0	0	33	25	15	328	67	240	675	23	81	814
0.00 to 0.30% Sulfur	0	2	2	0	0	0	0	0	0	0	15	26	1	0	42	0	0	44
0.31 to 0.50% Sulfur	0	0	0	0	0	0	0	0	0	22	0	0	0	0	22	23	0	45
0.51 to 1.00% Sulfur	0	0	0	0	10	0	0	10	3	0	16	2	240	261	0	0	32	303
1.01 to 2.00% Sulfur	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Greater Than 2.00% Sulfur	0	0	0	0	23	0	0	23	0	0	286	64	0	0	350	0	48	421
Residual Fuel Oil	3,935	115	4,050	116	1,801	343	433	2,693	720	6,648	5,786	253	77	13,484	353	9,088	29,668	
0.00 to 0.30% Sulfur	370	25	395	0	16	5	0	21	141	370	92	132	8	743	26	203	1,388	
0.31 to 0.50% Sulfur	721	0	721	0	40	0	126	166	29	241	93	-106	0	257	138	858	2,140	
0.51 to 1.00% Sulfur	1,737	0	1,737	116	633	0	171	920	421	1,970	823	112	5	3,331	86	1,346	7,420	
1.01 to 2.00% Sulfur	383	90	473	0	632	127	112	871	76	560	1,162	20	64	1,882	81	6,125	9,432	
Greater Than 2.00% Sulfur	724	0	724	0	480	211	24	715	53	3,507	3,616	95	0	7,271	22	556	9,288	

Note: Total may not equal sum of components due to independent rounding.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 30. Stocks of No.4 Fuel Oil and Residual Fuel Oil By Sulfur Content, November 1982
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III					PAD		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Dist. IV Rocky Mt.		Dist. V West Coast
No. 4 Fuel Oil -- 0.00 to 0.30% Sulfur																	
Refinery	0	4	4	0	0	0	0	0	0	0	1	57	4	0	62	0	66
Bulk Terminal	644	0	644	0	0	0	0	0	0	0	0	0	0	0	0	0	644
Total	644	4	648	0	0	0	0	0	0	0	1	57	4	0	62	0	710
No.4 Fuel Oil -- 0.31 to 0.50% Sulfur																	
Refinery	0	0	0	0	9	0	0	9	9	9	0	1	0	0	10	1	22
Bulk Terminal	71	0	71	0	0	0	0	0	0	0	0	1	0	0	1	0	72
Total	71	0	71	0	9	0	0	9	9	9	0	2	0	0	11	1	94
No. 4 Fuel Oil -- 0.51 to 1.00% Sulfur																	
Refinery	0	0	0	0	19	0	0	19	30	229	38	3	67	367	0	20	406
Bulk Terminal	682	0	682	0	28	0	0	28	0	0	0	0	0	0	0	0	710
Total	682	0	682	0	47	0	0	47	30	229	38	3	67	367	0	20	1,116
No. 4 Fuel Oil -- 1.01 to 2.00% Sulfur																	
Refinery	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	0	9
Bulk Terminal	433	0	433	0	0	0	0	0	0	0	0	0	0	0	0	36	469
Total	433	0	433	0	0	0	0	0	5	0	0	0	0	0	5	0	478
No.4 Fuel Oil -- Greater Than 2.00% Sulfur																	
Refinery	0	0	0	0	0	0	0	0	0	0	159	65	0	224	0	19	243
Bulk Terminal	65	3	68	9	0	0	0	9	52	0	0	0	0	0	52	0	129
Total	65	3	68	9	0	0	0	9	52	0	159	65	0	276	0	19	372
Residual Fuel Oil -- 0.00 to 0.30% Sulfur																	
Refinery	391	32	423	0	4	0	6	10	117	107	86	19	13	342	105	341	1,221
Bulk Terminal	5,704	0	5,704	0	25	0	0	25	0	0	2,016	3	0	2,019	0	0	7,748
Total	6,095	32	6,127	0	29	0	6	35	117	107	2,102	22	13	2,361	105	341	8,969
Residual Fuel Oil -- 0.31 to 0.50% Sulfur																	
Refinery	691	3	694	0	105	0	12	117	6	295	65	61	0	427	46	1,072	2,356
Bulk Terminal	2,800	0	2,800	0	91	0	0	91	0	125	38	0	0	163	0	0	3,054
Total	3,491	3	3,494	0	196	0	12	208	6	420	103	61	0	590	46	1,072	5,410
Residual Fuel Oil -- 0.51 to 1.00% Sulfur																	
Refinery	1,166	0	1,166	110	828	0	55	993	191	1,470	1,085	87	4	2,837	134	1,242	6,372
Bulk Terminal	7,920	183	8,103	80	643	11	46	780	106	393	105	0	0	604	0	395	9,882
Total	9,086	183	9,269	190	1,471	11	101	1,773	297	1,863	1,190	87	4	3,441	134	1,637	16,254
Residual Fuel Oil -- 1.01 to 2.00% Sulfur																	
Refinery	871	87	958	0	604	138	64	806	59	583	675	10	39	1,366	54	3,448	6,632
Bulk Terminal	3,592	332	3,924	136	358	63	451	1,008	0	602	113	0	0	715	0	749	6,396
Total	4,463	419	4,882	136	962	201	515	1,814	59	1,185	788	10	39	2,081	54	4,197	13,028
Residual Fuel Oil -- Greater than 2.00% Sulfur																	
Refinery	1,170	0	1,170	0	588	157	17	762	37	3,056	2,225	104	0	5,422	174	551	8,079
Bulk Terminal	11,341	86	11,427	0	177	75	152	404	203	1,159	861	22	0	2,245	0	592	14,668
Total	12,511	86	12,597	0	765	232	169	1,166	240	4,215	3,086	126	0	7,667	174	1,143	22,747
Residual Fuel Oil -- Sulfur Content Not Specified																	
Pipeline	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	22	23
Total	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	22	23

Note: Total may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.

Table 31. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, November 1982
(Thousands of Barrels)

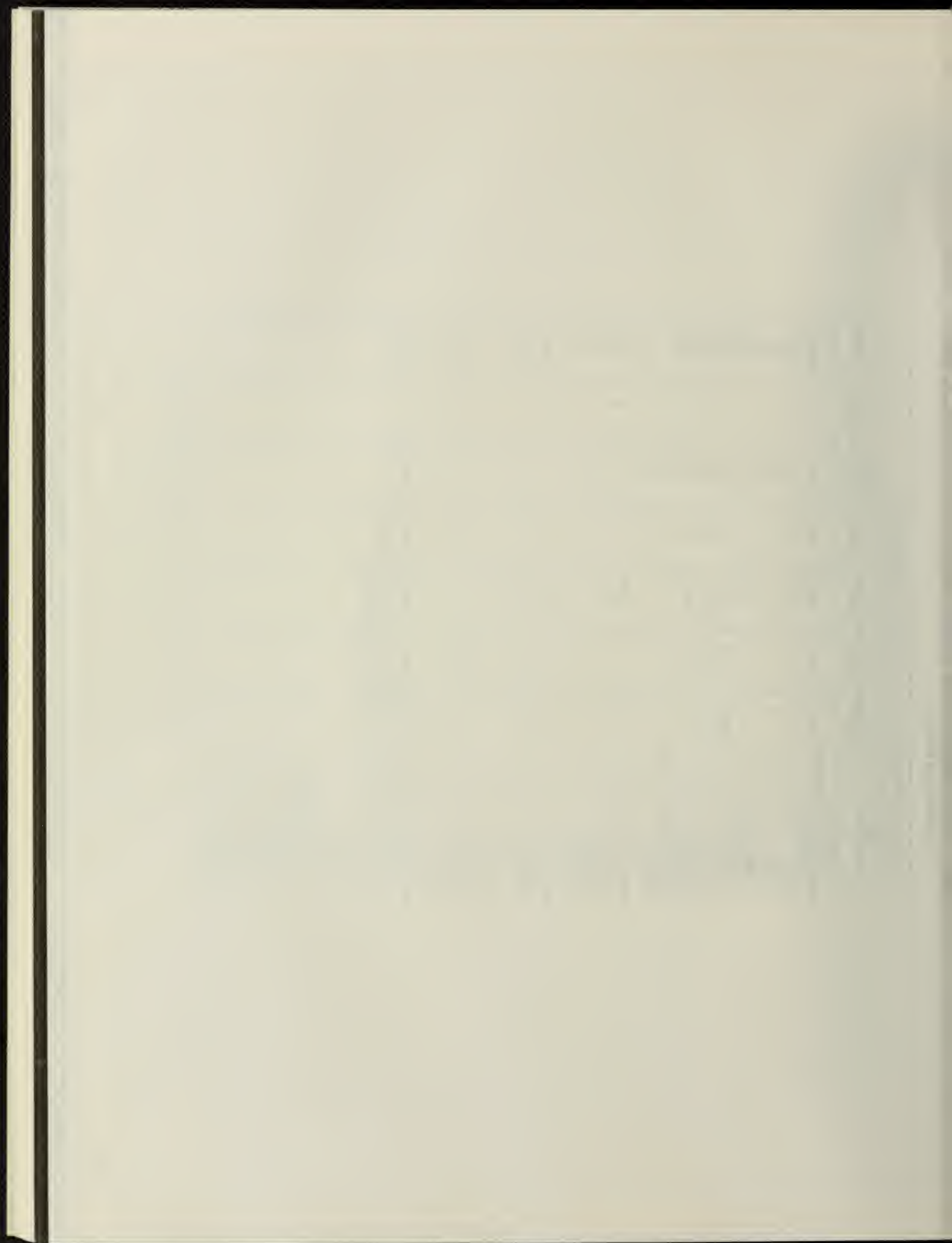
Country	Residual Fuel Oil						Total
	0.00 to 0.30%	0.31 to 0.50%	0.51 to 1.00%	1.01 to 2.00%	Greater Than 2.00%	Not Specified	
Arab OPEC							
Algeria	2,505	0	0	0	0	0	2,505
Iraq	0	0	0	0	0	0	0
Kuwait	0	0	0	0	0	0	0
Libya	216	162	0	0	0	0	378
Qatar	0	0	0	0	0	0	0
Saudi Arabia	0	0	0	0	0	0	0
United Arab Emirates	0	0	0	0	0	0	0
Subtotal Arab OPEC	2,721	162	0	0	0	0	2,883
Other OPEC							
Ecuador	0	0	0	189	0	0	189
Gabon	0	0	0	0	0	0	0
Indonesia	0	10	0	21	0	0	30
Iran	0	0	0	0	0	0	0
Nigeria	182	0	0	0	0	0	182
Venezuela	1,399	0	220	163	4,429	0	6,211
Subtotal Other OPEC	1,581	10	220	372	4,429	0	6,612
Other							
Angola	0	0	0	0	0	0	0
Australia	0	0	0	0	0	0	0
Bahamas	0	0	0	0	96	0	96
Bolivia	0	0	0	0	0	0	0
Brazil	680	0	663	0	0	0	1,343
Brunei	0	0	0	0	0	0	0
Canada	166	0	557	45	39	0	808
Egypt	0	0	0	0	0	0	0
France	0	0	0	0	0	0	0
Ghana	0	150	0	0	0	0	150
Liberia	0	0	0	0	0	0	0
Malaysia	0	0	0	0	0	0	0
Mexico	0	0	0	0	0	0	0
Netherlands	0	0	0	0	0	0	0
Netherlands Antilles	199	0	215	300	4,178	0	4,892
Norway	0	0	0	0	0	0	0
Oman	0	0	0	0	0	0	0
People's Republic of China	0	0	0	0	0	0	0
Peru	0	0	261	0	220	0	481
Puerto Rico	0	0	0	0	0	0	0
Spain	0	0	0	0	0	0	0
Tinidad	0	0	0	404	0	0	404
Tunisia	0	0	0	0	0	0	0
United Kingdom	0	0	215	0	0	0	215
Virgin Islands	452	905	1,563	343	522	0	3,785
Yugoslavia	0	0	0	0	0	0	0
Zaire	0	0	0	0	0	0	0
Other Western Hemisphere							
Hemisphere	232	200	548	650	0	0	1,630
Other Eastern Hemisphere	774	395	796	33	0	0	1,997
Subtotal Other	2,504	1,650	4,818	1,774	5,056	0	15,802
Total Imports	6,806	1,822	5,038	2,147	9,484	0	25,297

Note: Total may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.

Table 32. Imports of Residual Fuel Oil by Sulfur Content by State of Entry, November 1982
(Thousands of Barrels)

State	Residual Fuel Oil						Total
	0.00 to 0.30%	0.31 to 0.50%	0.51 to 1.00%	1.01 to 2.00%	Greater Than 2.00%	Not Specified	
PAD District I	5,926	1,362	4,418	1,645	9,431	0	22,780
Connecticut	0	0	215	0	0	0	215
Florida	0	0	215	48	1,604	0	1,868
Georgia	0	0	0	0	223	0	223
Maine	0	0	0	0	996	0	996
Maryland	0	0	846	30	364	0	1,239
Massachusetts	0	0	0	72	1,653	0	1,725
New Jersey	1,050	567	280	0	1,513	0	3,410
New York	4,458	575	2,281	812	1,207	0	9,333
North Carolina	0	0	0	347	287	0	634
Pennsylvania	309	220	580	0	93	0	1,202
Rhode Island	0	0	0	189	166	0	355
South Carolina	7	0	0	0	0	0	7
Virginia	102	0	0	146	1,324	0	1,573
PAD District II	115	0	319	41	39	0	514
Michigan	0	0	274	0	0	0	274
Minnesota	50	0	0	0	0	0	50
North Dakota	4	0	0	41	39	0	85
Ohio	60	0	45	0	0	0	105
PAD District III	746	200	301	404	14	0	1,666
Louisiana	2	0	220	404	14	0	640
Texas	744	200	81	0	0	0	1,026
PAD District IV	0	0	0	0	0	0	0
PAD District V	19	260	0	58	0	0	337
Hawaii	2	260	0	53	0	0	316
Oregon	0	0	0	4	0	0	4
Washington	17	0	0	0	0	0	17
All PAD Districts	6,806	1,822	5,038	2,147	9,484	0	25,297

Note: Total may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.



Glossary



Glossary

Definitions of Petroleum Products and Other Terms

Alcohol. The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group, $\text{CH}(\text{CH})_n\text{-OH}$. "Alcohol" includes ethanol and methanol.

Asphalt. A dark-brown-to-black cement-like material, containing bitumens as the predominant constituents, obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. The conversion factor is 42-gallon barrels per short ton.

ASTM. The acronym for the American Society for Testing and Materials.

Aviation Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation gasoline.

Aviation Gasoline (Finished). All special grades of gasoline for use in aviation reciprocating engines as given in ASTM Specification D 910 and Military Specification MIL-G-5572.

Barrel. A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt, and wax to barrels are given in the definitions for these products.

Butane. A normally gaseous paraffinic hydrocarbon, C_4H_{10} . It is extracted from natural gas or refinery gas streams. Butane is covered by ASTM Specification D1835 and Gas Processors Association Specification for commercial butane.

- Normal Butane—A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 31.1°F . This classification includes mixtures of gases that contain 80 percent or more normal butane.
- Other Butanes—All butanes not included as normal butane or isobutane.

Butane-Propane Mixtures. Mixtures consisting exclusively of butane and propane that conform to ASTM Specification D1835 and Gas Processors Association Specification for commercial butane-propane. They are extracted from natural gas and refinery gas streams.

Butylene. An olefinic hydrocarbon, C_4H_8 , recovered from refinery processes. It is reported in the "Butane" category.

Coal. A generic term applied to carbonaceous rocks that were formed by the partial or complete decomposition of vegetation. These stratified carbonaceous rocks are either solid or brittle and are highly combustible. Includes lignite, bituminous coal, and anthracite which conform to ASTM Specification D 388.

Crude Oil (including Lease Condensate). A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Lease condensate is included. Drips are also included, but topped crude (residual oil and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixtures with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign, according to the following:

- Domestic—Crude oil produced in the United States or from its outer continental shelf as defined in 43 U.S.C. 1331. Hydrocarbons such as shale oil and tar sand oil are included.
- Foreign—Crude oil produced outside the United States. Imported Athabasca hydrocarbons are included.

Distillate Fuel Oil. A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on- and off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1 and No. 2 heating oils, No. 1 and No. 2 diesel fuel oils, and No. 4 fuel oil.

- **No. 1 Fuel Oil**—A light distillate fuel oil intended for vaporizing pot-type burners. ASTM Specification D 396 specifies for this grade maximum distillation temperatures of 400° F. at the 10-percent point and 550° F. at the 90-percent point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100° F.
- **No. 2 Fuel Oil**—A distillate fuel oil for domestic heating for use in atomizing-type burners or for moderate capacity commercial-industrial burner units. ASTM Specification D 396 specifies for this grade temperatures at the 90-percent point between 540° and 640° F., and kinematic viscosities between 2.0 and 3.6 centistokes at 100° F.
- **No. 1 and No. 2 Diesel Fuel Oils**—Distillate fuel oils used in compression-ignition engines, as given by ASTM Specification D 975:
 1. **No. 1-D**—A volatile distillate fuel oil in the 400° to 550° F. boiling range for engines in service requiring frequent speed and load changes. Type C-B diesel fuel, which is used for city buses and similar operations, is included.
 2. **No. 2-D**—A distillate fuel oil of lower volatility in the 540° to 640° F. boiling range for engines in industrial and heavy mobile service. Type R-R diesel fuel for railroad compression-ignition engines and Type T-T for diesel-engine trucks are included.
- **No. 4 Fuel Oil**—A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D 396 or Federal Specification VV-F-815C; its kinematic viscosity is between 5.8 and 26.4 centistokes at 100° F. Also included is No. 4-D, a fuel oil for low- and medium-speed diesel engines that conforms to ASTM Specification D 975.

Eastern Hemisphere. That half of the earth east of the Atlantic Ocean which includes Europe, Asia, Africa, and Australia. The Hawaiian Foreign Trade Zone is in this hemisphere.

Electric Energy (Purchased). Electricity purchased for refinery operations that is not produced within the refinery complex.

Ethane. A normally gaseous paraffinic hydrocarbon, C_2H_6 , extracted from natural gas and refinery gas streams. "Ethane" includes any product containing 90 percent liquid volume or more ethane.

Ethane-Propane Mixtures. Mixtures of ethane and propane in which neither component is 90 percent or more of the liquid volume. It is extracted for natural gas and refinery gas streams.

Ethylene. An olefinic hydrocarbon, C_2H_4 , recovered from refinery and petrochemical processes. It is reported in the "Ethane" category.

Field Production. Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, and new supply of other hydrocarbons and alcohol.

Gas Well Gas. Natural gas produced from gas wells. Such gas may be either associated gas or non-associated gas.

- **Associated Gas**—Free natural gas in immediate contact, but not in solution, with crude oil in the reservoir.
- **Non-Associated Gas**—Free natural gas not in contact with, nor dissolved in, crude oil in the reservoir.

Imported Crude Oil Burned as Fuel. The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. "Imported crude oil burned as fuel" includes lease condensate and liquid hydrocarbons produced from tar sand oil, gilsonite, and oil shale.

Isobutane. A saturated branch-chain isomer of butane. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. This classification includes mixtures of gases that contain 80 percent liquid volume or more isobutane. It is extracted from natural gas and refinery gas streams.

Isopentane. A saturated branch-chain hydrocarbon, C_5H_{12} , obtained by fractionation of natural gasoline or isomerization of normal pentane.

Kerosene. A petroleum distillate that boils at a temperature between 300° and 550° F., that has a flash point higher than 100° F. by ASTM Method D 56, that has a gravity range from 40° to 46° API, and that has a burning point in the range of 150° to 175° F. It is a clean-burning product suitable for use as an illuminant when burned in wick lamps. Includes grades of kerosene called range oil having properties similar to No. 1 fuel oil, but with a gravity of about 43° API and having a maximum end-point of 625° F. Kerosene is used in space heaters, cook stoves, and water heaters.

Kerosene-Type Jet Fuel. A quality kerosene product with an average gravity of 40.7° API, a 1 percent distillation temperature of 400° F., and an end-point of 572° F. It is covered by ASTM Specification D 1655 and Military Specification MIL-T-5624L (Grade JP-5 and JP-8). It is used primarily for commercial turbojet and turboprop aircraft engines.

Lease Condensate. A natural gas liquid recovered from gas well gas (associated and non-associated), lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

Lease Separator. A surface facility used for separating casinghead gas from produced crude oil and water and separating gas from that portion of associated gas and non-associated gas that liquefies at the temperature and pressure conditions of the separator.

Liquefied Petroleum Gases (LPG). Propane, propylene, butanes, butylene, ethane-propane mixture and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids. Formerly called "Liquefied Gases."

Liquefied Refinery Gases (LRG). Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration they are retained in the liquid state. The reported categories are ethane and/or ethylene, propane and/or propylene, butane and/or butylene, butane-propane mixtures, and isobutane. Excludes still gases used for chemical or rubber manufacture which are reported as petrochemical feedstocks and also excludes liquefied gases ready for blending into gasoline which are reported as gasoline blending components. Liquefied refinery gases are reported for use as petrochemical feedstocks, other uses, or both.

Lubricants. A substance used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. "Lubricants" includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. The three categories reported are:

- **Bright Stock**—A refined, high viscosity lubricating oil base stock that is usually made from residuum by a treatment such as deasphalting, acid treatment, or solvent extraction.
- **Neutral**—A distillate lubricating oil base stock with a viscosity that is usually not above 55 Saybolt Universal Seconds (SUS) at 100° F. It is prepared by a treatment such as hydrofining, acid treatment, or solvent extraction.
- **Other**—A lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils.

Miscellaneous Products. Includes all finished products not classified elsewhere. "Miscellaneous products" include petrolatum, absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and other finished products.

Motor Gasoline Blending Components. Finished components in the gasoline range that will be used for blending or compounding into finished motor gasoline. Pool gasoline is included in this category.

Motor Gasoline (Finished). A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition

engines. Specifications for motor gasoline, as given in ASTM Specification D 439 or Federal Specification VV-G-1690B, include a boiling range of 122° to 158° F. at the 10-percent point to 365° to 374° F. at the 90-percent point and a Reid vapor pressure range from 9 to 15 psi. "Motor gasoline" includes finished leaded gasoline, finished unleaded gasoline, and gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

- **Finished Leaded Gasoline**—Contains more than 0.05 grams of lead per gallon or more than 0.005 grams of phosphorus per gallon. The actual lead content of any given gallon, however, may vary as a function of the size of the producer and company according to specific Environmental Protection Agency waiver provisions. Premium and regular grades are included, depending on the octane rating.
- **Finished Unleaded Gasoline**—Contains up to 0.05 grams of lead per gallon and 0.005 grams of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating.
- **Gasohol**—A blend of alcohol and finished motor gasoline that is no more than 90 percent of finished motor gasoline (leaded or unleaded as described above) and no less than 10 percent or more alcohol (ethanol or methanol).

Motor Gasoline (Total). Includes finished leaded motor gasoline, finished unleaded motor gasoline, motor gasoline blending components, and gasohol.

Naphtha-Type Jet Fuel. A fuel in the heavy naphtha boiling range with an average gravity of 52.8° API and 20 to 90 percent distillation temperatures of 290° to 470° F., meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. This category excludes ram-jet and petroleum rocket fuels, which are included in the "Miscellaneous Products" category.

Natural Gas. A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

Natural Gas Field Facility. A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, butane, natural gasoline, etc., and to control the quality of natural gas to be marketed.

Natural Gas Plant Liquids. Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials, and are classified as follows: Ethane, propane, ethane-propane mix, isobutane, butane, butane-propane mix, isopentane, natural gasoline, plant condensate, unfractionated stream, and other products from natural gas processing plants (i.e., products meeting the standards of finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

Natural Gas Processing Plant. A facility designed to recover natural gas liquids from a stream of natural gas that may or may not have been processed through lease separators or natural gas field facilities. The facility also controls the quality of natural gas to be marketed. Cycling plants are classified as gas processing plants.

Natural Gasoline. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Producers Association.

OPEC. The acronym for the Organization of Petroleum Exporting Countries, oil-producing and-exporting countries that have organized for the purpose of negotiating with oil companies on matters of oil production, prices, and future concession rights. Current members are Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

Operable Distillation Capacity. The maximum amount of input that can be processed by a crude oil distillation unit in a 24-hour period, making allowances for processing limitations due to types and

grades of inputs, limitations of downstream facilities, scheduled and unscheduled downtimes, and environmental constraints. Includes any shutdown capacity that could be placed in operation within 90 days.

Other Hydrocarbons. Materials received by a refinery and consumed as raw materials. Include hydrogen, coal, tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

Petrochemical Feedstocks. Chemical feedstocks derived from petroleum, principally for the manufacture of synthetic rubber and a variety of plastics. The categories reported are "Naphtha-less than 400° F. end-point" and "Other oils over 400° F. end-point."

- **Naphtha less than 400° F. end-point**—A naphtha with an end point of less than 400° F. and that is reported as used as a petrochemical feedstock.

- **Other oils over 400° F. end-point**—Oils with an end point over 400° F. and that are reported as used as a petrochemical feedstock.

Petroleum Coke. A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is 5.42-gallon barrels per short ton.

- **Marketable Coke**—Those grades of coke that are produced in delayed or fluid cokers and which may be recovered as relatively pure carbon. This "green" coke may be sold or further purified by calcining.

- **Catalyst Coke**—In many catalytic operations (i.e., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon which is used as fuel in the refinery process. This carbon or coke is not recoverable in concentrated form.

Petroleum Products. Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, natural gasoline and isopentane, plant condensate, unfractionated stream, ethane, liquefied petroleum gases, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, naphtha less than 400° F. end-point, other oils-over 400° F. end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Petroleum Refinery. An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas plant liquids, other hydrocarbons, and alcohol.

Plant Condensate. One of the natural gas plant liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

Primary Stocks. Stocks of crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tankfarms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in transit from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. "Primary Stocks" excludes stocks of foreign origin that are held in bonded warehouse storage.

Propane. A normally gaseous hydrocarbon, C_3H_8 , extracted from natural gas and refinery gas streams. It is used primarily as a fuel and as a petrochemical feedstock. Propane is covered by ASTM Specification D1835, Gas Processors Association for commercial and HD-5 propane, and ASTM Specification for special duty propane.

Propylene. An olefinic hydrocarbon, C_3H_6 , recovered from refinery and petrochemical processes. It is reported in the "Propane" category.

Residual Fuel Oil. Topped crude of refinery operations. "Residual Fuel Oil" includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D 396 and Federal Specification VV-F-815C; Navy Special fuel oil as defined in Military Specification MIL-F-859E including Amendment 2; Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Imports of residual fuel oil include "Imported Crude Oil Burned as Fuel Oil."

Road Oil. Any heavy petroleum oil, including residual asphaltic oils, used as a dust palliative and surface treatment of roads and highways. It is generally produced in six grades; from 0, the most liquid, to 5, the most viscous.

Special Naphthas. All finished products within the gasoline range that are used as paint thinners, cleaners, and solvents. These products are refined to a specified flash point and have a boiling range of 90° to 220° F. "Special naphthas" includes all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D 484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

Steam (Purchased). Steam that is purchased for use by a refinery that was not generated from within the refinery complex.

Still Gas (Refinery Gas). Any form or mixture of gas produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, butane, butylene, propane, propylene, etc. Still gas is reported for petrochemical feedstock use and refinery fuel use.

- **Petrochemical Feedstock Use**—Includes all refinery streams which are used by chemical or rubber manufacturing operations for further processing, less the amount of such streams returned to the source refinery. Finished petrochemical products are not included. For example, polyethylene, butadiene, etc. are considered petrochemical products; therefore, only their feedstock equivalents are included.
- **Fuel Use**—All other still gas.

Strategic Petroleum Reserve (SPR). Stocks (currently, only crude oil) maintained by the Federal Government for use during periods of major supply interruption.

Unfinished Oils. Includes all oils requiring further processing, except those requiring only mechanical blending.

Unfractionated Stream. Mixtures of unsegregated natural gas plant liquid components excluding those included in plant condensate. This product is extracted from natural gas.

Wax. A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is a light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades reported are microcrystalline, crystalline—fully refined, and crystalline—other. The conversion factor is 280 pounds per 42-gallon barrel.

- **Microcrystalline Wax**—Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics:

- Penetration at 77° F. (D-1321)—60 maximum.
- Viscosity at 210° F. in Saybolt Universal Seconds (SUS)
 - (D-88)—60 SUS (10.22 centistokes) minimum to 150
 - SUS (31.8 centistokes) maximum.
- Oil content (D-721)—5 percent minimum.

- **Crystalline-Fully Refined Wax**—A light-colored paraffin wax having the following characteristics:

- Viscosity at 210° F.
 - (D-88)—59.9 SUS (10.18 centistokes) maximum.
- Oil Content (D-721)—0.5 percent maximum.
- Other +20 color, Saybolt minimum.

- **Crystalline-Other Wax**—A paraffin wax having the following characteristics:

- Viscosity at 210° F. (D-88)—59.9 SUS (10.18 centistokes) maximum.
- Oil Content (D-721)—0.51 percent minimum to 15 percent maximum.

Western Hemisphere. That half of the earth that includes North and South America and the surrounding waters.

Bureau of Mines Petroleum Refining Districts and PAD Districts

PAD District

Refining District

I

East Coast—District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

Appalachian #1—The State of West Virginia, those parts of the States of Pennsylvania and New York not included in the East Coast District.

Appalachian #2—The following counties of the State of Ohio: Erie, Huron, Crawford, Marion, Delaware, Franklin, Pickaway, Ross, Pike, Scioto, and all counties east thereof.

II

Indiana—Illinois—Kentucky—The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and that part of the State of Ohio not included in the Appalachian District.

Minnesota—Wisconsin—North and South Dakota—The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

Oklahoma—Kansas—Missouri—The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

Texas Inland—The State of Texas except the Texas Gulf Coast District.

Texas Gulf Coast—The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

III

Louisiana Gulf Coast—The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

North Louisiana—Arkansas—The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

New Mexico—The State of New Mexico.

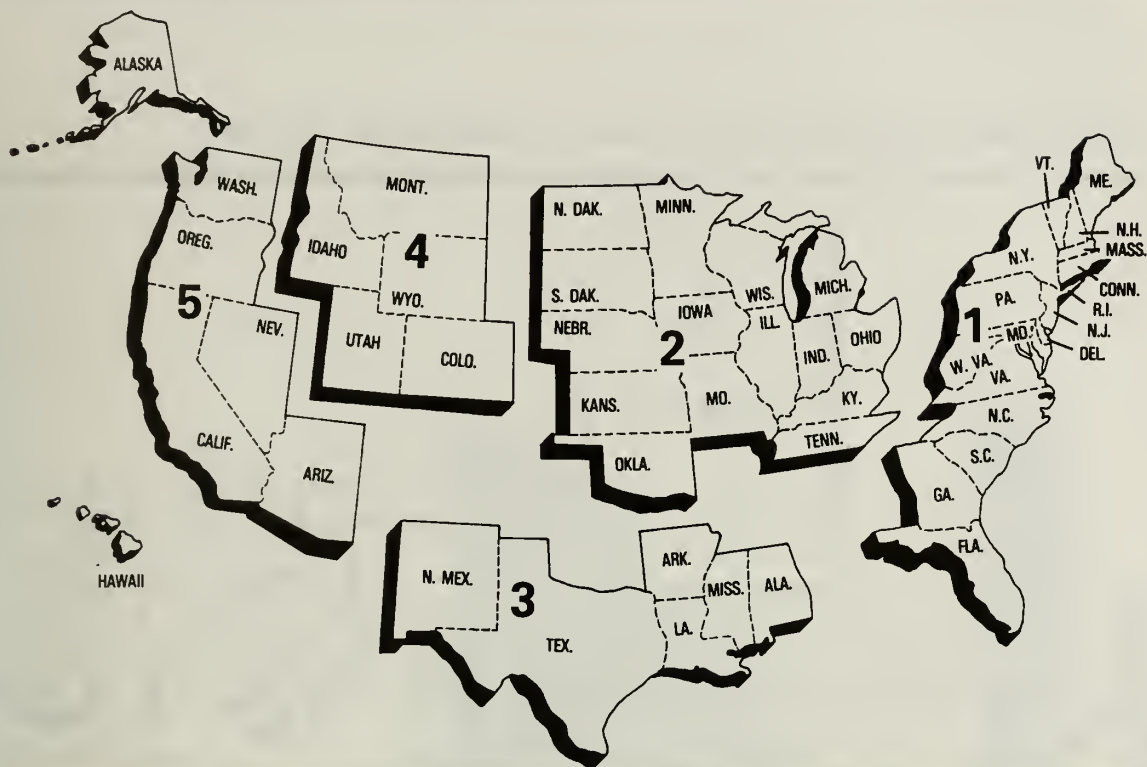
IV

Rocky Mountain—The States of Montana, Idaho, Wyoming, Utah, and Colorado.

V

West Coast—The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

Petroleum Administration for Defense (PAD) Districts



Bureau of Mines Refining Districts



District Map Oil and Gas Division Railroad Commission of Texas



Explanatory Notes



Explanatory Notes

Note 1.1 EIA-64: Natural Gas Liquids Operations Report

Background

The EIA-64, "Natural Gas Liquids Operations Report" evolved from a survey designed and conducted by the United States Geological Survey beginning in 1911. This form collects data on the production and storage of natural gas plant liquids at natural gas processing plants and fractionators.

Description of Survey

Universe

The universe includes all operators of facilities designed to: (1) extract liquid hydrocarbons from natural gas streams (natural gas processing plants); (2) separate a combined products liquid hydrocarbon stream into its component products, i.e. propane, butane, natural gasoline, etc. (fractionators); or (3) store the liquid hydrocarbon output of plants and fractionators.

The mailing list is automated. It is maintained by matching periodically with the *LP Gas Almanac* listings (including supplements) and the *Oil and Gas Journal* Processing Plant Survey listings, and by making changes reported by the respondents.

Information Collected

The data are submitted monthly by facility and include all products that the company controls through possession, regardless of ownership. The main items of information collected by the EIA-64 are shown by the example of the form presented below.

Collection Methods

Completed reports are required to be postmarked 20 days following the last day of the report month. Follow-up telephone calls are made to nonrespondents in order to collect data before publication of the aggregated data.

Imputing Missing Data

Imputation is performed only for companies that submitted a report in the previous month. For such companies, previous monthly values are used for current values. The previous month's ending stock value is used for both the current month's beginning stocks and the current month's ending stocks. The value of shipments is adjusted to balance stock level, production, receipts, plant fuel use, and losses. In the event that the previous month's data were estimated, the respondent is contacted and requested to submit estimates, if necessary, to be followed by a resubmission of actual data.

Response Rates

The initial response rate averages 85 percent, with a final response averaging 98 percent as a result of telephone follow-up procedures.

Data Processing

Upon receipt, the reports are reviewed for identification section omissions, duplicate submissions, and identification information changes. The data are then entered and edited. The edit program includes checks for invalid data entry codes, range checks for current-month to previous-month change (absolute and relative), arithmetic calculation errors, line balancing errors, etc. Telephone calls are made to respondents to resolve questions.

Note 1.2 EIA-87, 88, 89 and 90: Joint Petroleum Reporting System

Background

The Joint Petroleum Reporting System (JPRS) comprises four surveys: the "Refinery Report" (EIA-87); the "Bulk Terminal Stocks Report" (EIA-88); the "Pipeline Products Report" (EIA-89); and the

Natural Gas Liquids Operations Report

This Report is Mandatory Under Public Law 93-275. Failure to Comply may Result in Criminal Fines, Civil Penalties and Other Sanctions as Provided by Law

Report Type	B	1	0
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EIA Company Identification Number

Report Date (Last Day of Reporting Month)

Zip Code of Plant Location

☐ If Resubmission, Insert X in Block

Form Approved
OMB No 1905-0109

For DOE Use Only

Section 1. Natural Gas Processing Plant and Fractionator Operations (Barrels of 42 Gallons)

Products	Product Code	Stocks Beginning of Month (a)	Receipts During Month (b)	Inputs During Month (c)	Production During Month (d)	Shipments To					Plant Fuel Use (k)	Losses (m)	Stocks End of Month (n)
						Fractionating Facility (e)	Storage Facility (f)	Refinery (g)	Chemical Plant (h)	Other (i)			
Ethane	110												
Propane	231												
Ethane Propane Mix	241												
Isobutane	233												
Normal Butane	235												
Other Butanes	236												
Butane Propane Mix	234												
Isopentane	240												
Natural Gasoline	14												
14 and Less RVP	228												
Over 14 RVP	229												
Plant Condensate	210												
Unfractionated Stream	227												
Gasoline													
Finished Aviation	111												
Finished Leaded	132												
Finished Unleaded	133												
Gasohol	135												
Special Naphthas	051												
Jet Fuel													
Naphtha Type	211												
Kerosene Type	213												
Kerosene	311												
Disillate Fuel Oil	412												
Other Products (Specify)													
Overage (Inputs) or Shortage (Production)	911	X	X				X	X	X	X		X	X

"Crude Oil Stocks Report" (EIA-90). This group of forms collects data on petroleum refinery operation and on storage of crude oil and petroleum products. The origins of JPRS lie in the voluntary petroleum reporting systems instituted by the Bureau of Mines (BOM) soon after it was established as a part of the Department of the Interior in May 1910.

Description of Survey

Universe

The respondent universe of each JPRS survey is defined as follows:

EIA-87: All petroleum refineries and plants producing finished motor gasoline through the mechanical blending of liquids which are operated or controlled in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Hawaiian Foreign Trade Zone, and Guam.

EIA-88: All bulk terminal facilities in the 50 States and the District of Columbia, Puerto Rico, and the Virgin Islands that (a) have total bulk storage capacity of 50,000 barrels or more and/or (b) receive petroleum products by tanker, barge, or pipeline regardless of ownership of the material.

EIA-89: All products pipeline companies that carry petroleum products (including interstate, intrastate and intracompany pipelines) in the 50 States and the District of Columbia.

EIA-90: Crude oil pipeline companies (gathering and trunk pipeline companies), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water (in excess of 1,000 barrels), regardless of ownership in the 50 States and the District of Columbia.

The list of respondents is kept current by checking for new respondents in the *Oil and Gas Journal*, a weekly magazine; newspaper articles; the Office of Resource Applications publication "Trends in Refinery Capacity & Utilization;" the Office of Refinery Operations (ERA) list of U.S. Refiners; and the annual survey EIA-177 "Capacity of Petroleum Refineries."

Information Collected

The main items of information collected by EIA-87, are shown by the example presented below. The EIA-88 and EIA-89 collect data on petroleum product stocks. The EIA-90 collects data on crude oil stocks and crude oil used directly as fuel.

Collection Methods

The data for the JPRS surveys are collected on a monthly basis. Completed forms are required to be postmarked by the 20th day following the report month. Telephone follow-up calls are made to nonrespondents in order to collect data before publication deadline. An automated mailing list is maintained and is used to monitor receipt of the forms.

Imputing Missing Data

Imputation is performed only for companies that submitted a report in the previous month. For these companies, the previous monthly values are used for current values. The previous month's ending stock value is used for both the current month's beginning stocks and the current month's ending stocks. The value of shipments is adjusted to balance stock level, production receipts, and losses. In the event that the previous month's data were estimated, the respondent is contacted and requested to submit estimates, if necessary, to be followed by a resubmission of actual data.

Response Rates

As of the filing deadline, the response rate of the JPRS respondents is over 90 percent. All companies that have not responded are contacted by telephone. Although data are taken by telephone to expedite processing, a certified submission is still required. Thirty calendar days after the report month, data for companies that still fail to file the form are estimated based on prior month's data. Names of companies that fail to file for two consecutive months are forwarded to DOE for further noncompliance action. Final response rate is 100 percent.

Report Type: **B 0 1** EIA Company Identification No.: Report Period:
Yr. Mo.

SECTION 6. REFINERY STOCKS, RECEIPTS, INPUTS, PRODUCTION, SHIPMENTS AND REFINERY FUEL USE AND LOSSES (Thousands of Barrels of 42 Gallons)								
ITEM DESCRIPTION	PRO- DUCT CODE	STOCKS BEGINNING OF MONTH A	RECEIPTS DURING MONTH B	INPUTS DURING MONTH C	PRODUCTION DURING MONTH D	SHIPMENTS DURING MONTH E	REFINERY FUEL USE AND LOSSES DURING MONTH F	STOCKS END OF MONTH G
Crude oil (incl. lease condensate) Total (sum of codes 010 and 020)	050				X			
Domestic (incl. Alaskan)	010	X		X	X	X	X	X
Foreign	020	X		X	X	X	X	X
Alaskan	011	X		X	X	X	X	X
Products of natural gas proc. plants								
Ethane	110				X			
Propane	231				X			
Ethane-propane mixtures	241				X			
Isobutane	233				X			
Normal butane	235				X			
Other butanes	236				X			
Butane-propane mixtures	234				X			
Natural gasoline and isopentane	220				X			
Plant condensate	210				X			
Unfractionated stream	227				X			
Other hydrocarbons and hydrogen	090				X			
Alcohol	091				X			
Unfinished oils	812							
Gasoline								
Finished leaded, motor	132							
Finished unleaded, motor	133							
Blending components, motor	134							
Gasohol	135							
Finished aviation	111							
Blending components, aviation	112							
Special naphthas (solvents)	061							
Jet fuel								
Naphtha-type	211							
Kerosene-type	213							
Kerosene (incl. range oil)	311							
Distillate fuel oil, Less No. 4	412							
No. 4 fuel oil	414							
Residual fuel oil	511							
Lubricating oils								
Bright stock	853							
Neutral	855							
Other	859							
Asphalt	900							
Wax								
Microcrystalline	061							
Crystalline fully refined	071							
Crystalline-other	081							
Petroleum coke								
Marketable	021							
Catalyst	022							X
Road oil	031							
Still gas								
Petrochemical feedstock use	042							
Other use	044							
Ethane and/or ethylene								
Petrochemical feedstock use	612							
Other use	652							
Propane and/or propylene								
Petrochemical feedstock use	613							
Other use	653							
Butane and/or butylene								
Petrochemical feedstock use	614							
Other use	654							
Butane-propane mixtures								
Petrochemical feedstock use	616							
Other use	656							
Isobutane petrochemical feedstock use	615							
Naphtha—less than 400° end-point								
Petrochemical feedstock use	822							
Other oils—over 400° end-point								
Petrochemical feedstock use	824							
Other finished products								
Non-fuel use	097							
Fuel Use	098							
Overage (Inputs) or shortage (production)	911	X	X			X	X	X
TOTAL	999	X	X			X	X	X

Note 1.3 EIA-161, 162, 163, 164 and 165: Weekly Petroleum Reporting System

Background

The Weekly Petroleum Reporting System (WPRS) comprises five surveys: the "Refinery Report" (EIA-161); the "Bulk Terminal Stocks Report" (EIA-162); the "Pipeline Product Stock Report" (EIA-163); the "Crude Oil Stocks Report" (EIA-164); and the "Imports Report" (EIA-165).

The EIA weekly reporting system was designed to collect data similar to those collected under the monthly Joint Petroleum Reporting System (JPRS) (See Note 1.2). In the WPRS, selected petroleum companies report weekly data to EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On the Forms EIA-161 through EIA-164 companies report data on a custody basis. On the Form EIA-165, the importer of record reports each shipment entering the United States. Current weekly data and the most recent monthly data from the JPRS are used to estimate the published weekly totals.

Description of Survey

Universe

The sample of companies that report weekly in the WPRS was selected from the universe of companies that report monthly in either the JPRS system or the ERA-60 system (for imports). All sampled companies report data only for facilities in the 50 States and the District of Columbia.

The sampling frame for each weekly survey is defined as follows:

EIA-161: Uses the EIA-87 universe, which includes all petroleum refineries in the United States and its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and bulk terminals that blend motor gasoline.

EIA-162: Uses the EIA-88 universe, which includes all bulk terminal facilities in the United States and its territories that have total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline.

EIA-163: Based on the EIA-89 universe, which includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including interstate, intrastate and intracompany pipeline movements. Pipeline companies that only transport natural gas liquids are not included in the EIA-163 frame. Only those pipeline companies which transport products covered in the weekly survey are included.

EIA-164: Uses the EIA-90 universe, which consists of all trunk pipeline companies in the United States and its territories which transport crude oil, all refining companies, all crude oil producers, all terminal operators, and all storers of 1,000 barrels or more of crude oil.

EIA-165: Uses the ERA-60 universe, which includes all importers of record of crude oil and petroleum products into the United States and Puerto Rico.

Sampling

The sampling procedure used for the weekly system is the cut-off method. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous period. Companies are chosen for the sample beginning with the largest and adding companies until the total sample covers about 90 percent of the total for the previous time period.

Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. All canvassed firms and terminal operating companies must file by 5:00 p.m. on the Monday following the close of the report period, 7 a.m. Friday. During the processing week, company corrections of the prior week's data are also entered.

Formula and Calculations

After the company reports have been checked and entered into the weekly data base, ratio estimates of the weekly totals are calculated from the reported data.

First, the current week's data for a given product reported by companies in that region are summed. (Call this weekly sum, W_s) Next, the most recent month's data for the product reported by those same companies are summed. (Call this monthly sum, M_s). Finally, let M_t be the sum of the most recent month's data for the product as reported by *all* companies. Then, the current week's ratio estimate for that product for all companies is given by.

$$W_t = \frac{M_t}{M_s} \circ W_s$$

This procedure is used directly to estimate total weekly inputs to refineries and production.

To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Under such conditions, the ratio method is known to result in large errors. Hence, a number of other procedures for estimating weekly imports were considered. The average ratio method was selected for estimating imports because it produces estimates that were close to benchmark values computed from monthly data. Estimates are obtained using the ratio method, but with each company in turn omitted from the sample. These estimates are then averaged to obtain the average ratio estimate.

Imputing Missing Data

The ratio method of estimation automatically imputes for nonresponse. Data from companies that do not respond are excluded from both the weekly and the monthly totals for the sampled companies.

Response Rates

The response rate as of the day after the filing deadline is about 80 percent for the EIA-161; 75 percent for the EIA-162; 95 percent for the EIA-163; 80 percent for the EIA-164; and greater than 95 percent for the EIA-165. However, more forms are received the next day, bringing the final response rates up. Late respondents are contacted by telephone. Nearly all of the major companies report on time. The nonresponse rate for the published estimates is usually between 2 percent and 5 percent.

Note 1.4 EIA-170: Tanker and Barge Shipments of Crude Oil and Petroleum Products Between Districts

Background

The EIA-170 survey collects data for calculation of monthly petroleum supply and disposition figures on U.S. and PAD District levels.

Instrument and Design

This form is designed to collect data on total movements by tanker and barge of crude oil and petroleum products between PAD Districts or between PAD Districts and the Panama Canal, by shipping State and receiving State.

Universe

The respondent universe of the EIA-170 consists of all known companies and plants that have custody of crude oil and petroleum products transported by tanker and barge between PAD Districts or between PAD Districts and the Panama Canal. There are currently about 60 respondents.

Collection Methods

Survey data are collected by mail every month. The filing deadline is the 20th calendar day of the month following the report period. The response rate as of the filing deadline is about 98 percent. Late respondents are contacted by telephone. All responses are processed each month before release of the data for publication.

Note 1.5 ERA-60: Reports of Oil Imports into the United States and Puerto Rico

Background

The "Report of Oil Imports into the United States and Puerto Rico" (ERA-60) survey was designed by the Economic Regulatory Administration (ERA) of the Department of Energy to collect data on port of entry, country of origin, destination, and quantity of imported crude oil and petroleum products, as well as sulfur content and API gravity. All licensed importers and importers of record are required to report. The "Shipments of Refined Products from Puerto Rico to the United States" (P-133-M-O) survey was designed to collect data on imports to the United States that are not covered by the ERA-60.

Universe

The monthly submission of Form ERA-60 and P-133-M-O is required by all licensed importers and importers of record into the United States and Puerto Rico. The respondent universe consisted of approximately 750 firms as of June 30, 1981. The respondent universe for these surveys is updated whenever an import license is granted by the Office of Oil Imports of the ERA.

Collection Methods

The survey data are collected by mail each month. It is mandatory for each respondent to file the ERA-60/P-133-M-O by the 15th working day of the month following the reporting period. Resubmissions are received frequently and are processed when received.

Response Rates

In December 1980, the survey had a response rate of 92 percent by the filing deadline. The universe was 640 at that time. (Because this is a dynamic survey, the universe is constantly changing.) Standard followup of nonrespondents is made to insure that all reports are received, since data are not imputed for nonrespondents. Response rate is generally 98-99% by the time the data are first published. Revised publications are not generated as standard operating procedure. The ERA-60 file is never closed; resubmissions are constantly received and processed.

Note 1.6 Census Import (IM-145) and Export (EM-522 and EM-594) Tabulations

The foreign trade statistics program, conducted by the Bureau of the Census, involves compilation and dissemination of a large body of data relating to the imports and exports of the United States.

Import Statistics

Coverage

The import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. Customs territory (includes the 50 States, the District of Columbia, and Puerto Rico), without regard to whether or not a commercial transaction is involved. In general, the statistics record the physical movement of merchandise into the United States from foreign countries, with the exception of the following types of transactions that are excluded from the statistics:

1. Merchandise shipped in transit through the United States, when documented with Customs as an intransit movement.
2. Shipments between the United States and Puerto Rico, the Virgin Islands, Guam, American Samoa, and other U.S. possessions; shipments between any of these outlying areas; and imports into U.S. possessions from foreign countries.
3. U.S. merchandise returned by U.S. Armed Forces for their own use.

Source of Import Information

The official U.S. import statistics are compiled by the Bureau of the Census from copies of the import entry and warehouse withdrawal forms that importers are required by law to file with Customs officials (Customs Forms 7501- 7505).

Imported petroleum is reported as "Imports for Consumption." Imports for consumption are a combination of entries for immediate consumption and withdrawals from warehouses for consumption. With certain exceptions as indicated above, these data generally reflect the total of commodities entered into U.S. consumption channels.

Country and Area of Origin

The country reported in the statistics as the country of origin is defined as the country where the merchandise was grown, mined, or manufactured. In instances where the country of origin cannot be determined, the transactions are credited to the country of shipment.

Export Statistics

Coverage

The export statistics reflect both government and nongovernment exports of domestic and foreign merchandise from the U.S. Customs territory (includes the 50 States, the District of Columbia, and Puerto Rico) to foreign countries, without regard to whether or not the exportation involves a commercial transaction. In general, the statistics record the physical movement of merchandise out of the United States to foreign countries, with the exception of the following types of transactions:

1. Shipments between the United States and Puerto Rico, the Virgin Islands, Guam, American Samoa, and other U.S. possessions; between any of these outlying areas; and shipments from U.S. Possessions to foreign countries.
2. Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.
3. Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

Source of Export Information

The official U.S. export statistics are compiled by the Bureau of the Census primarily from copies of Shipper's Export Declarations. Shipper's Export Declarations are required to be filed with Customs officials, except when qualified exporters have been authorized to submit data in the form of magnetic tape, punched cards, or monthly Shipper's Summary Export Declarations directly to the Bureau of the Census.

Country and Area of Destination

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

Note 2 Estimation

The geographic coverage of all estimates is the 50 United States and the District of Columbia, including adjacent areas of the outer continental shelf, excluding the Hawaiian Foreign Trade Zone.

Note 2.1 Supply

The components of petroleum supply are field production, refinery production, imports, stock withdrawal or addition, crude oil used directly, and losses.

Field Production is the sum of crude oil (including lease condensate) production, natural gas processing plant production, and new supply (field production) of other liquids used by refineries.

Crude oil production is estimated based on data received from State conservation and revenue agencies. Reports of crude oil production from each of the 31 producing States are not received until several months after the other components of petroleum supply described in Explanatory Note 2.1 are available for publication. For an explanation of the crude oil estimation procedure used until the State reports are complete, see Explanatory Note 2.2.

Field production of natural gas plant liquids (NGPL), including finished petroleum products, is reported monthly on survey Form EIA-64, "Natural Gas Liquids Operation Report." Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. For survey description and other detail, see Explanatory Note 1.1.

Field production of natural gas plant liquids (NGPL), including finished petroleum products, is reported monthly on survey Form EIA-64, "Natural Gas Liquids Operations Report." Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. For survey description and other detail, see Explanatory Note 1.1.

Refinery Production of LRGs, ethane, and finished petroleum products is reported monthly on survey Form EIA-87, "Refinery Report." Published production of these products equals refinery production minus refinery input. Refinery production of unfinished oils and of motor and aviation gasoline blending components appears on a net basis under refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month.

Refinery production is also reported weekly on survey Form EIA-161, "Refinery Report." See Explanatory Notes 1.2 and 1.3 for survey descriptions and other detail. It should also be noted that refineries do not report production of crude oil, natural gasoline, isopentane, unfractionated stream, plant condensate, or other hydrocarbons and alcohol.

Imports of crude oil and petroleum products are reported monthly on Form ERA-60, "Report of Oil Imports into the United States and Puerto Rico," and Form P-133-M-O, "Shipments of Refined Products (including unfinished oils) from Puerto Rico to the United States." In addition, the Census Bureau Tabulation IM-145 summarizes import data from Customs import declarations reported on Customs Forms 7501 and 7505. The most prominent difference between the EIA and Census systems appears in imports of liquefied petroleum gases (LPG), where Census data show a much higher level of imports than Energy Information Administration data. This occurs because the ERA-60 respondent frame was built by monitoring importers of licensed products and because LPGs are not licensed products. Therefore, respondents that only import LPGs have not been identified, and do not report these imports to the Department of Energy. Since these importers are required to file form 7501 with the U.S. Customs Service, EIA obtains data on imports of LPGs from Census Tabulation IM-145. Additional data taken from the IM-145 are relatively small quantities of naphtha and kerosene-type jet fuels, distillate fuel oils, and residual fuel oils withdrawn from bonded storage for use in international trade and for military offshore use. Even though these duty-free fuels are stored on United States shores, they did not enter the United States for domestic consumption and therefore are not included in the ERA-60 reporting system.

Imports are also reported weekly on survey Form EIA-165, "Imports Report." See Explanatory Notes 1.3, 1.5, and 1.6 for survey descriptions and other detail.

Stock Withdrawal (+) or Addition (-) is calculated by subtracting stocks at the end of the month from stocks at the beginning of the month. (Note: The beginning stocks of one month are equal to the ending stocks of the previous month.) A positive result (+) would represent a withdrawal from stocks and an increase in petroleum supplies distributed for domestic consumption. A negative result (-) would represent a buildup of stocks and reduce petroleum supplies distributed for domestic consumption. For survey forms used to make stock withdrawal or addition calculations see Explanatory Note 2.4.

Unaccounted-for Crude Oil is a balancing item that represents the difference between crude oil supply and disposition. Crude oil supply is the sum of field production, imports and stock withdrawal or addition, less crude used directly and losses. Crude oil disposition is the sum of exports and refinery input.

Unaccounted-for crude oil is calculated by subtracting crude oil supplies from crude oil disposition. A negative result indicates that refiners and exporters reported use of more crude oil than was reported to have been available to them. (This occurs, for example, when imports are undercounted due to late reporting or other problems.) A negative result would indicate that more crude oil was reported to have been supplied to refiners and exporters than they reported used. This calculation is performed for crude oil to ensure that product supplied for crude oil is always zero.

Crude Oil Used Directly and Losses is the sum of crude oil losses at refineries, crude oil burned at refineries, and crude oil burned on leases. Crude oil losses and consumption at refineries are reported on Form EIA-87, "Refinery Report." Crude oil burned on leases is reported on Form EIA-90, "Crude Oil Stocks Report." Crude oil burned on leases is divided into two categories: crude burned as residual fuel oil and crude burned as distillate fuel oil. Crude burned on leases appears as a negative supply to crude oil (a reduction in crude oil supplies) and as a positive supply to residual and distillate fuel oil (an increase to these supplies).

Note 2.2: Domestic Crude Oil Production

Data for the Crude Oil Production System (COPS) are reported to the Department of Energy by each of the individual State conservation agencies, which collect crude oil production values for tax purposes. In addition, the U.S. Geological Survey reports the volume of crude oil that is produced offshore in Federally-owned waters. With the exception of six State conservation agencies, all of these reports are received monthly. After each calendar year, these monthly numbers are updated using the annual reports from the State conservation agencies and the U.S. Geological Survey. The six States that do not report monthly values are Indiana, New York, Ohio, Pennsylvania, West Virginia, and Wyoming. Monthly values are estimated for these States using the individual linear trends of their historical annual crude oil production values.

There is a time lag of approximately 3 to 4 months between the end of the reporting month and the time when the actual values are available for this publication. In order to provide more timely crude oil production estimates, the Department of Energy has established a series of statistical models that forecast the volume of crude oil production based on the historical production patterns. The models use Auto Regressive Integrated Moving Average (ARIMA) to analyze series of monthly crude oil production values collected over several years.

In order to provide detailed crude oil production information on both the PAD District level and for the major producing States, the total United States crude oil production volume was separated into nine distinct groupings. The nine different time series are the monthly reported crude oil production volumes for: (1) all the States in PAD District 1; (2) all the states in PAD District 2; (3) Texas; (4) Louisiana; (5) the States in PAD District 3 excluding Texas and Louisiana; (6) all the States in PAD District 4; (7) Alaska; (8) California; and (9) the States in PAD District 5 excluding Alaska and California. Monthly data collected beginning in January 1973 are used for each of these time series.

A separate ARIMA model is identified for each time series. New model parameters are estimated monthly for each of these nine updated time series. Then, these ARIMA models are used to forecast crude oil production volumes for the month of interest. These values are then aggregated into PAD District and national totals. The forecasts made during 1981 had an average error of less than 0.1 percent compared to the monthly crude oil production volumes eventually reported by the States.

Note 2.3 Disposition

The components of petroleum disposition are refinery input, exports, and products supplied for domestic consumption.

Refinery Inputs of crude oil, NGPL and other liquids are reported monthly on survey Form EIA-87, "Refinery Report." Published inputs of unfinished oils, and motor and aviation gasoline blending components, equal refinery input minus refinery output. Refinery inputs of finished petroleum products are reported on a net basis under refinery production. Refinery inputs are also reported weekly on survey Form EIA-161, "Refinery Report." See Explanatory Notes 1.2 and 1.3 for survey description and other details.

Exports of crude oil and petroleum products are compiled from Census Bureau tabulations EM522 and EM594. Exports include crude oil shipments to Puerto Rico, the Virgin Islands, and the Hawaiian Foreign Trade Zone, which are obtained from refinery receipts reported on Form EIA-87.

Product supplied for each product is calculated by summing field production plus refinery production, plus imports, plus stock withdrawal or minus stock addition, plus crude oil used directly and losses (plus net receipts when calculated on a PAD District basis), minus refinery input, minus exports. This formula ensures that total disposition equals total supply. Products supplied indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative when total disposition of that product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported, (2) misreporting or delayed reporting of data, and (3) for calculations on a PAD District basis, incomplete coverage of interdistrict movements data compiled to calculate net receipts.

Note 2.4 Stocks

Primary stocks of crude oil are the sum of ending stocks reported monthly on Form EIA-87, "Refinery Report," and Form EIA-90, "Crude Oil Stocks Report." Crude oil held in the Strategic Petroleum Reserve is included unless otherwise noted. Alaskan crude oil in transit is also included. Stocks of crude oil are also reported weekly on Form 161, "Refinery Report," and Form EIA-164, "Crude Oil Stocks Report." Primary stocks of petroleum products are summed from data reported on the Form EIA-64, "Natural Gas Liquids Operations Report," Form EIA-87, "Refinery Report," Form EIA-88, "Bulk Terminal Stocks Report," and Form EIA-89, "Pipeline Products Stocks Report." Primary stocks of petroleum products do not include secondary stocks held by dealers and jobbers, or stocks held by consumers. Petroleum product stocks are also reported weekly on Form EIA-161, "Refinery Report," Form EIA-162, "Bulk Terminal Stocks Report," and Form EIA-163, "Pipeline Products Stocks Report." For survey descriptions and other details see Explanatory Notes 1.1, 1.2, and 1.3.

Note 2.5 Average Stock Levels

The graphs displaying monthly stock levels of petroleum products, crude oil, motor gasoline, distillate fuel oil, residual fuel oil, liquified petroleum gases and ethane, and other products provide the user with recent data as well as a summary of data from the most recent 3 year period from January through December or from July through June. This summary takes the form of an "average range" that includes seasonal variation determined from a longer time period. The average range represents the historical pattern; it is not a forecast.

These curves are updated every 6 months effective January 1 or July 1 by basing the "average ranges" on a more recent time period. At that time, each 3-year data series will be adjusted by dropping the first 6 months and including the most recent 6 months.

For each data series, the monthly seasonal factors were estimated by means of a seasonal adjustment technique developed at the Bureau of Census (Census X-11). The seasonal factors were assumed to be stable (i.e., unchanging from year to year) and additive (i.e., the series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported stock levels). The intent of deseasonalization is to remove only seasonal variation from the data. Thus, a deseasonalized series would contain the same trends and irregularities as the original data. For crude oil stocks, the derived seasonal factors were very small relative to crude oil stock levels. Therefore, the seasonal factors for crude oil stock levels were set to zero. The seasonal factors for total petroleum (crude and products), distillate fuel oil, residual fuel oil, liquefied petroleum gases and ethane, and other products were derived using monthly data from 1974-1980. For motor gasoline, the seasonal factors were based on monthly data from 1975, 1976, 1978, 1979 and 1980. In 1977, there was virtually no seasonal behavior in motor gasoline stocks. Monthly stock levels stayed at the same high level for the entire year. In addition, the seasonal patterns in 1973 and 1974 appeared to be different from those in recent years. It was therefore assumed that the seasonal patterns in 1973, 1974, and 1977 were not representative of the recent past, and these years were not used in the determination of seasonal patterns for motor gasoline stocks. Because of these differences in the year-to-year seasonal fluctuation of motor gasoline, the evidence for the illustrated seasonal patterns for total petroleum (crude and products), crude oil, distillate fuel oil, residual fuel oil, liquefied petroleum gases and ethane, and other products is stronger than is the evidence for the illustrated seasonal patterns for motor gasoline.

In some cases, these seasonal patterns do not show a smooth transition from month to month. For example, the June factor for residual fuel oil is slightly less than the May and July values, making a bump in the curve. As there is little difference in the magnitude of these seasonal factors, it is possible that this variation is due to the small number of observations (7 years) and the data variability.

After seasonal factors are derived, the most recent 3 year period (from January through December or from July through June) is deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard error of the deseasonalized 36 months is calculated adjusting for extreme data points. The width of the "average range" is twice this standard error.

The upper curve of the "average range" is defined as the average plus the seasonal factors plus the standard error. The lower curve is defined as the average plus the seasonal factors minus the standard error.

Note 2.6 Movements

Movements of crude oil between PAD Districts are reported on Form EIA-170, "Tanker and Barge Report." Petroleum product movements are reported on Forms EIA-170 and EIA-89, "Pipeline Products Report." Net receipts are calculated by summing total movements into and total movements from each PAD District by pipelines, tankers, and barges, and subtracting for the difference. Movements of crude oil by pipeline are not reported. For survey descriptions and other detail, see Explanatory Notes 1.2 and 1.4.

Note 2.7 Preliminary Monthly Statistics

Data from the Weekly Petroleum Reporting System (Forms EIA-161, 162, 163, 164 and 165) are used to estimate the most recent monthly values for the historical statistics. Since some of the weekly reporting periods overlap 2 adjacent months, it is necessary to use weighting factors in the calculation of the monthly values.

To calculate monthly estimates of crude oil and petroleum product imports, crude oil input to refineries, and production of petroleum products for a specific month, the weekly estimates are weighted by the number of days of that month included in each week, then summed.

End-of-month stock levels of crude oil and the major products (motor gasoline, distillate fuel and residual fuel) are calculated in a similar manner, but use only the two weekly reporting periods that cover the end-of-week stocks before and after the end of the month. The end-of-month stock level is calculated by first calculating the stock change between the 2 weeks. The daily stock change between the two end-of-week stock levels is then calculated. This number is multiplied by the weighting factor of earlier of the 2 weeks (the week that covers the last day of the month of interest). This change is added to the earlier of the two end-of-week stock levels to estimate the end-of-month stock level.

Preliminary monthly estimates of domestic crude oil production are calculated as described in Explanatory Note 2.2.

Note 3 Accuracy of Petroleum Supply Data

Early in 1981, the Energy Information Administration completed an assessment of the accuracy of principal petroleum supply data series.¹ This assessment concentrated on two methods of analysis:

- Comparisons between EIA's final annual estimates published in the *Petroleum Statement Annual (PSA)* and annual estimates from independent sources.
- Comparisons between EIA's final monthly estimates published in the *PSA* and EIA's earlier estimates published in the *Monthly Petroleum Statistics Report* and the *Petroleum Statement, Monthly* (predecessor of the *Monthly Petroleum Statement*).

Selected excerpts from these comparisons are presented below.

Comparisons of Annual Estimates

All of the systems that provide data for the *Petroleum Supply Monthly*, except for the weekly systems, try to collect data from the entire universe of their potential respondents. They do not sample, and have no sampling errors. Inaccuracies in the data still occur because of problems such as incomplete lists of respondents, errors in the responses, and conceptual errors in the design of the data systems. Such inaccuracies are hard to identify and even harder to quantify. Some understanding of the overall accuracy of the estimates can be achieved by comparing estimates derived from independent sources of data, as shown in the following tables. Close agreements among annual estimates from several independent sources support the conclusion that the estimates are accurate, and accuracy in the annual estimates implies accuracy in the monthly estimates that comprise the annual estimates.

Crude Oil Production

Comparisons among independent estimates of annual crude oil and lease condensate production lead to the conclusion that the *PSA* estimates are probably accurate to within 1 percent.

Crude Oil Imports

Comparisons among independent estimates of annual crude oil imports lead to the conclusion that the *PSA* estimates are probably accurate to within 1 percent. This conclusion is supported by a study of EIA and Customs/Census import data performed for EIA.²

Motor Gasoline Supplied

Comparisons among independent estimates of the annual volume of motor gasoline supplied for domestic use show that differences in the estimates grew between 1977 and 1979. By 1979, the EIA estimate of sales by refiners and the Environmental Protection Agency's estimate of production had grown about 5-7 percent larger than the comparable *PSA*, Lundberg, and American Petroleum Institute (API) estimates. Research conducted by EIA in 1979 and 1980³ confirmed that the lower

¹*An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292, June 1981.

²Maxima Corporation, *Petroleum Imports Reporting Systems, Preliminary Draft*, (Silver Spring, Maryland: February 1980). Prepared for the Office of Energy Information Validation, Energy Information Administration, U.S. Department of Energy, Washington, D.C.

³Office of Energy Information Validation, Energy Information Administration, U.S. Department of Energy, *An Evaluation of Published EIA Gasoline Supply Estimates* (Washington, D.C.: April 1980).

estimates were inaccurate, and identified changes in the petroleum industry that had an adverse effect on the PSA estimate. During 1980, EIA developed and tested improved procedures for collecting petroleum supply data, and implemented them in January 1981. (See Explanatory Note 4.)

Distillate Fuel Oil Supplied

Comparisons among independent estimates of the annual volume of distillate fuel oil supplied for domestic use lead to the conclusion that the PSA estimates are probably accurate to within 1 to 2 percent.

Residual Fuel Oil Supplied

Comparisons among independent estimates of the annual volume of residual fuel oil supplied for domestic use seem to show sizable and consistent differences between the EIA estimates of sales by refiners and the PSA and API estimates. When imports of residual fuel oil by nonrefiners are added to the refiner sales, however, the difference between refiner sales and the PSA estimates are narrowed to within 1 percent. The comparisons therefore lead to the conclusion that the PSA estimates are probably accurate to within 1 to 2 percent.

Comparison of Estimates of the Volume of Crude Oil and Lease Condensate Production, 1977-1979

	Estimated Volume of Production in Millions of 42-U.S. Gallon Barrels ^a			Comparative Estimate as a Percent of the PSA Estimate		
	1979	1978	1977	1979	1978	1977
EIA Estimate from Petroleum Statement Annual ^b	3,121	3,178	3,009	///	///	///
<u>Comparative Estimates</u>						
American Petroleum Institute Estimate from API Monthly Statistical Report ^c	3,130	3,214	3,021	100.3%	101.1%	100.4%
Census Estimate from the Annual Survey of Oil and Gas ^d	—	3,148	3,016	—	99.1%	100.2%
Oil and Gas Journal Estimates ^e of Total Production derived from Monthly Data	3,168	3,165	3,005	101.5%	99.6%	99.9%
EIA Estimate from Annual Survey of Oil and Gas Reserves (EIA-23) ^f	3,102	3,144	3,001	99.4%	98.9%	99.7%

/// = Not applicable

— = Not available

^aVolumes are rounded to the nearest million barrels.

^bFrom Table 6 in EIA's *Petroleum Statement Annual*, 1977, 1978, 1979.

^cFrom issues of the American Petroleum Institute's *Monthly Statistical Report*. The annual values were obtained by summing the monthly values for each of the twelve-month periods.

^dFrom Table 1, p.2 of the Bureau of Census' *Annual Survey of Oil and Gas*, 1978.

^eFrom issues of the *Oil and Gas Journal*. Monthly estimates are in thousands of barrels per day. They are converted to millions of barrels by dividing by 1,000 and multiplying by the number of days in the reporting period.

^fFrom EIA's *U.S. Crude Oil and Natural Gas Reserves 1979 Annual Report* (Table 19, p. 33), *1978 Annual Report* (Table 16, p. 20), and *1977 Annual Report* (Table 22, p.36).

Geographic coverage: the 50 United States and District of Columbia with adjacent areas of the Outer Continental shelf.

SOURCE: *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292.

Comparison of Estimates of the Volume of Crude Oil Imports, 1977-1979

	Volume of Millions of 42-U.S. Gallon Barrels ^a			Comparative Estimates as a Percent of the Primary Estimate		
	1979	1978	1977	1979	1978	1977
EIA Estimate of Receipts at Ports of Entry (ERA-60) from <i>Petroleum Statement, Annual</i> ^b	2,380	2,320	2,414	///	///	///
Comparative Estimates						
American Petroleum Institute Estimate of Receipts as Reported by Refiners ^c	2,346	2,323	2,360	98.6%	100.1%	97.8%
Customs/Census Estimate of Receipts at Ports of Entry (Customs Forms 7501 and 7502) ^d	2,415	2,338	2,431	101.5%	100.8%	100.7%
EIA Estimate of Inputs of Foreign Crude at Refineries (ETA-87) ^e	2,364	2,334	2,431	99.3%	100.6%	100.7%

/// = Not applicable

^aVolumes are rounded to the nearest million barrels.

^bFrom Table 1 in EIA's *Petroleum Statement Annual* 1977, 1978, 1979. This table also includes imports for the Strategic Petroleum Reserve (SPR) which were 7.5 million in 1977, 58.8 million in 1978, and 24.4 million in 1979.

^cEstimate equals the sum of the annual estimate of imports derived from API's *Monthly Statistics Report* (which excludes imports for SPR), and the EIA estimates for imports for the SPR which are listed in footnote b above. The annual estimates from API data are equal to the sum of the API monthly estimates weighted by the number of days in each month.

^dData on imports to Puerto Rico which are included in the source for these estimates have been excluded from these estimates in keeping with the geographic coverage of the table. Data are from computer printouts of the Bureau of Census Report IM-245-X dated April 3, 1980 (1977 and 1978 data) and December 19, 1980 (1979 data).

^eEstimate equals refinery inputs of foreign crude plus (minus) stock increases (decreases) of foreign crude. The data for the computation are published in EIA's *Petroleum Statement, Annuals*. The stock changes (all increases) are derived from data on stocks of crude oil at refineries, bulk terminals, and pipelines as reported on Form EIA-90, plus the increase in the SPR. This estimate excludes crude oil imported and not used as refinery input.

Geographic coverage: the 50 United States and the District of Columbia.

SOURCE: *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292.

Comparison of Estimates of the Volume of Motor Gasoline Supplied for Domestic Use, 1977-1979

	Volume in Millions of 42-U.S. Gallon Barrels ^a			Volume Supplied as a Percent of the PSA Estimate		
	1979	1978	1977	1979	1978	1977
EIA Estimate from <i>Petroleum Statement, Annual</i> ^b	2,573	2,711	2,625	///	///	///
Comparative Estimates						
EIA Estimate of Sales by Refiners (P-306) ^c	2,708	2,792	2,671	105.2%	103.0%	101.8%
Environmental Protection Agency Estimate derived from Production Data ^d	2,766	2,851	2,706	107.5%	105.2%	103.1%
Lundberg Surveys, Inc. Estimate of U.S. Motor Gasoline Sales ^e	2,631	2,746	2,656	102.3%	101.3%	101.2%
American Petroleum Institute Estimate of Deliveries ^f	2,579	2,697	2,612	100.2%	99.5%	99.5%

/// = Not applicable

^aVolumes are rounded to the nearest million 42-U.S. gallon barrels.

^bDerived from Table 2 in EIA's *Petroleum Statement Annual*, 1977, 1978, 1979.

^cDerived from Table 1 of EIA's December issue of *Petroleum Market Shares, Report on Sales of Refined Petroleum Products* 1977, 1978, 1979.

^dThe estimate shown is derived by substituting EIA Domestic Production values with values of domestic production tabulated from the Environmental Protection Agency Bq. Form 3520-2, "Lead Additive Report for Refineries." The EPA production estimates are 2,694 million barrels in 1977, 2,757 in 1978, and 2,648 in 1979 as compared from a summary sheet provided by Mr. Bob Summerhayes of EPA.

^eFrom the mid-June issues of the "National Petroleum News," 1979 and 1980.

^fAPI publishes monthly estimates in thousands of barrels per month of the volume of motor gasoline delivered from primary storage. The initial published monthly estimate is derived from API sources, but in later API publications the estimates are revised using EIA data. The values shown in the table are equal to the sums of the initial published API monthly estimates of motor gasoline multiplied by the number of days per month.

Geographic coverage: the 50 United States and the District of Columbia.

SOURCE: *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292.

Comparison of Estimates of the Volume of Distillate Fuel Oil (Including Kerosene) Supplied for Domestic Use, 1977-1979

	Volume in Millions of 42-U.S. Gallon Barrels ^a			Volume Supplied as a Percent of the PSA Estimate		
	1979	1978	1977	1979	1978	1977
EIA Estimate from <i>Petroleum Statement Annual</i> ^b	1,269	1,307	1,275	///	///	///
Comparative Estimates						
EIA Estimate of Sales by Refiners (P-306) ^c	1,282	1,275	1,242	101.0%	97.6%	97.4%
American Petroleum Institute Estimate of Deliveries ^d	1,291	1,300	1,277	101.7%	99.5%	100.2%

/// = Not applicable

^aVolumes are rounded to the nearest million 42-U.S. gallon barrels.

^bDerived from Table 2 in EIA's "Petroleum Statement Annual", 1977, 1978, 1979.

^cDerived from Table 1 of EIA's December issue of *Petroleum Market Shares, Report on Sales of Refined Petroleum Products*, 1977, 1978, 1979.

^dAPI publishes monthly estimates in thousands of barrels per month of the volume of distillate and kerosene delivered from primary storage. The initial published monthly estimate is derived from API sources, but in later API publications the estimates are revised using EIA data. The values shown in the table are equal to the sums of the initial published API monthly estimates of distillate and kerosene multiplied by the number of days per month.

Geographic coverage: the 50 United States and the District of Columbia.

SOURCE: *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292.

Comparison of Estimates of the Volume of Residual Fuel Oil Supplied for Domestic Use, 1977-1979.

	Volume in Millions of 42-U.S. Gallon Barrels ^a			Volume Supplied as a Percent of the PSA Estimates		
	1979	1978	1977	1979	1978	1977
EIA Estimate from <i>Petroleum Statement, Annual</i> ^b	1,024	1,095	1,109	///	///	///
Comparative Estimates						
EIA Estimate of Sales by Refiners (P-306) ^c	796	832	847	80.8%	79.6%	80.1%
American Petroleum Institute Estimate of Deliveries ^d	1,044	1,101	1,114	102.0%	100.5%	100.4%

/// = Not Applicable

^aVolumes are rounded to the nearest million 42-U.S. gallon barrels.

^bDerived From Table 2 in EIA's *Petroleum Statement Annual*, 1977, 1978, 1979. Refinery fuel use, subtracted from the figures in the source referenced below, has been reinstated in these estimates.

^cDerived from Table 1 of EIA's December issue of *Petroleum Market Shares, Report on Sales of Refined Petroleum Products*, 1977, 1978, 1979.

^dAPI publishes monthly estimates in thousands of barrels per month of the volume of residual fuel oil delivered from primary storage. The initial published monthly estimate is derived from API sources, but in later API publications the estimates are revised using EIA data. The values shown in the table are equal to the sums of the initial published API monthly estimates of residual fuel oil multiplied by the number of days per month.

Geographic Coverage: the 50 United States and the District of Columbia.

SOURCE: *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292.

Comparisons of Monthly Estimates Over Time

Inaccuracies in petroleum data resulting from incomplete or delayed reports from respondents and from data processing errors are usually eliminated from the final PSA estimates. Such inaccuracies can still have important effects on the monthly estimates published in the *Petroleum Supply Monthly* and its predecessors. The following tables compare the initial monthly estimates published in the *Monthly Petroleum Statistics Report* and the *Petroleum Statement, Monthly* with the final monthly estimates published in the PSA. During 1977-1979, the *Monthly Petroleum Statistics Report* was published about 60 days after the end of the reporting month, and the *Petroleum Statement, Monthly* was published about 120-150 days after the end of the reporting month. The tables show that, both in terms of bias and in terms of standard deviation, the later estimates are consistently more accurate than the earlier estimates. In spite of this, the earlier estimates may have been more valuable to users of energy information because of the large difference in timeliness.

For purposes of comparison, the *Petroleum Supply Monthly* is scheduled to be published on about the same time lag as the *Monthly Petroleum Statistics Report*. Caution should be exercised, however, in drawing conclusions from this similarity. The *Petroleum Supply Monthly* uses improved data processing procedures developed and successfully implemented during 1981. In addition, since 1979, EIA has greatly improved the accuracy of its 60-day crude oil production estimates and is making progress in improving the accuracy of its 60-day import estimates.

**Initial Monthly Estimates of Production, Stocks, and Imports of Crude Oil As A Percent of EIA's Final Published Estimates ^a
January 1977 - December 1979**

	Production During Month		Primary Stocks At End of Month		Imports During Month	
	Mean Percent	Standard Deviation	Mean Percent	Standard Deviation	Mean Percent	Standard Deviation
EIA's Estimates from the <i>Monthly Petroleum Statistics Report^b</i>	# 98.7%	1.6%	# 98.3%	1.4%	# 95.4%	2.4%
EIA's Estimates from the <i>Petroleum Statement, Monthly^c</i>	# 99.6%	0.6%	100.0%	0.1%	# 98.4%	1.3%

**Initial Monthly Estimates of Products Supplied for Domestic Use as A Percent of EIA's Final Published Estimates ^a
January 1977 - December 1979**

	Motor Gasoline		Distillate Fuel Oil		Residual Fuel Oil	
	Mean Percent	Standard Deviation	Mean Percent	Standard Deviation	Mean Percent	Standard Deviation
EIA's Estimates from the <i>Monthly Petroleum Statistics Report^b</i>	99.9%	1.3%	99.9%	2.3%	# 97.9%	2.7%
EIA's Estimates from the <i>Petroleum Statement, Monthly^c</i>	100.0%	0.3%	99.7%	0.5%	99.4%	1.2%

**Initial Monthly Estimates of End-of-Month Primary Stocks As a Percent of EIA's Final Published Estimates ^a
January 1977 - December 1979**

	Motor Gasoline		Distillate Fuel Oil		Residual Fuel Oil	
	Mean Percent	Standard Deviation	Mean Percent	Standard Deviation	Mean Percent	Standard Deviation
EIA's Estimates from the <i>Monthly Petroleum Statistics Report^b</i>	99.7%	0.8%	99.7%	1.1%	100.1%	0.7%
EIA's Estimates from the <i>Petroleum Statement, Monthly^c</i>	99.9%	0.2%	100.0%	0.1%	100.1%	0.5%

Represents a difference from 100% found to be statistically significant at the 95% level of confidence (n = 36).

^aFinal monthly estimates are from the "Petroleum Statement, Annual" for 1977, 1978 and 1979. The mean percent is calculated as follows: each preliminary estimate is first expressed as a percent of EIA's final published estimate, these are then summed and the sum is divided by the number of estimates. The standard deviation is the square root of the quantity computed by summing the squared deviation of the percents from the mean percent and then dividing by the number of percents.

^bBased on 36 initial estimates appearing in issues dated January 1977 - December 1979.

^cBased on 36 initial estimates appearing in issues dated January 1977 - December 1979.

SOURCE: *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292.

Note 4 Changes in Petroleum Industry Reporting

Petroleum statistics contained in this report for all years through 1980 were developed using definitions, concepts, reporting procedures and aggregation methods that are consistent with those developed by the U.S. Bureau of Mines. Research conducted by the Energy Information Administration in 1979 and 1980 indicated that changes had occurred in the petroleum industry that were not being adequately reflected in EIA's reporting systems.

EIA reporting forms, definitions, and procedures were modified beginning in January 1981 to describe industry operations more accurately. Unfortunately, empirical information is not available to precisely measure the data shortcomings throughout 1980. However, estimates of the magnitudes of difference in the major data series are described below to form a basis for comparing 1979, 1980, and 1981 data.

Motor Gasoline

Prior to 1979, the EIA product-supplied series for motor gasoline was consistently about 2 percent lower than the Federal Highway Administration (FHWA) gasoline-sales data series, which is derived from State tax receipts. This difference increased to about 4 percent in 1979 and 5 percent in 1980. There are two primary causes for this growing difference. First, refinery operations, particularly the flows of unfinished oils and the redesignation of some finished products, were not being accurately described on the EIA survey forms. Second, a large amount of gasoline was being produced away from refineries at "downstream blending stations" to take advantage of provisions in regulations governing the amount of lead that could be added. These blending stations were not reporting gasoline production to the EIA until the data system was changed in January 1981.

Quantitative estimates of the magnitude of the difference—in EIA's gasoline product supplied data in 1979 and 1980 have been made by the EIA and the American Petroleum Institute (API). The following table provides 1979 and 1980 data as published in the *Petroleum Statement Annual*, as well as EIA and API estimates of "recast" motor gasoline product supplied. EIA recast estimates were based upon preliminary monthly information in the *Monthly Petroleum Statement*. The ranges displayed in the EIA column reflect uncertainty in the estimates. Also shown are the FHWA motor gasoline sales statistics for those years. EIA has recently published a study of the quality of these FHWA data.¹

¹Office of Energy Information Validation, Energy Information Administration, U.S. Department of Energy, *Error Profile of the Motor Fuel Taxation Data used to Establish and Monitor State Emergency Conservation Targets* (Washington, D.C.: December, 1981).

**Finished Motor Gasoline Product Supplied on Old and New Basis
(Thousand Barrels per Day)**

	1979				1980			
	EIA Reported	API Recast	EIA Recast	FHWA ¹	EIA Reported	API Recast	EIA Recast	FHWA ¹
Jan	6,830	7,230	7,084- 7,246	6,984	6,323	6,789	6,630- 6,791	6,672
Feb	7,254	7,496	7,389- 7,568	7,538	6,596	6,983	6,831- 7,003	6,830
Mar	7,229	7,414	7,301- 7,463	7,316	6,406	6,753	6,607- 6,768	6,713
Apr	7,055	7,300	7,187- 7,353	7,375	6,800	7,014	6,886- 7,052	6,981
May	7,213	7,429	7,313- 7,475	7,428	6,729	6,954	6,823- 6,984	7,044
Jun	7,191	7,483	7,350- 7,516	7,441	6,657	6,966	6,824- 6,991	7,049
Jul	6,902	7,241	7,105- 7,266	7,299	6,743	6,973	6,960	7,132
Aug	7,330	7,546	7,426- 7,588	7,619	6,648	6,841	6,828	7,090
Sep	6,881	7,122	7,016- 7,262	7,232	6,510	6,692	6,962	6,685
Nov	6,791	7,068	6,956- 7,122	7,142	6,234	6,507	6,516	6,951
Dec	6,730	7,106	6,966- 7,127	7,064	6,632	6,948	6,936	6,993
Average	7,034	7,302	7,183- 7,347	7,309	6,579	6,882	6,806- 6,889	6,925

¹FHWA gasoline statistics published in their 1979 Table MF-33G, 08-06-80, contain aviation gasoline as well as motor gasoline. Only motor gasoline data are included in published 1980 data. Consequently, the 1979 data shown above were reduced by subtracting aviation gasoline product supplied quantities as published by EIA in the 1979 *Petroleum Statement Annual*. The 1980 FHWA data published in their 1980 Table MF-33GA, August 1981, did not require this adjustment.

Distillate and Residual Fuel Oil

Distillate and residual fuel oil refinery production statistics through 1980 were adjusted to account for an imbalance between unfinished oil supply and disposition. The reported quantities of refinery inputs of unfinished oils typically exceed the available supply of unfinished oils. It has been assumed that this occurs when distillate and residual fuel oil produced by a refinery is shipped to another refinery, where it is treated as unfinished oil. This oil is then reprocessed rather than used or sold as distillate or residual fuel oil.

For many years (including 1980), the difference between unfinished oil disposition and supply was subtracted from distillate and residual fuel oil production to adjust for this discrepancy. Two-thirds of the difference was applied to distillate, and one-third to residual fuel oil.

Beginning in January 1981 this adjustment was discontinued because there was not sufficient empirical evidence to support it. The following table presents distillate and residual fuel oil refinery production in 1980 as published (adjusted) and on the same basis as 1981 statistics are now being completed (unadjusted) to permit comparison between 1980 and 1981 data series. Adjusted distillate and residual fuel oil product supplied volumes differ from the unadjusted volumes by the same amounts as the adjusted and unadjusted production volumes.

Adjusted and Unadjusted Refinery Production, and Unadjusted Product Supplied of Distillate and Residual Fuel Oils, by Month for 1979 and 1980 (Thousand Barrels Per Day)

1979

Month	Distillate Fuel Oil				Residual Fuel Oil			
	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied
Jan.	3,043	3,108	65	4,646	1,912	1,946	34	3,594
Feb.	2,888	2,945	57	4,869	1,792	1,822	30	3,625
Mar.	3,019	3,026	7	3,671	1,719	1,723	4	3,243
Apr.	2,945	2,978	32	3,048	1,639	1,656	17	2,524
May	3,066	3,093	27	3,025	1,586	1,600	14	2,517
Jun.	3,153	3,187	35	2,743	1,548	1,566	18	2,601
Jul.	3,305	3,344	38	2,601	1,575	1,594	20	2,471
Aug.	3,321	3,359	38	2,799	1,584	1,603	20	2,570
Sep.	3,354	3,306	-48	2,599	1,627	1,602	-25	2,584
Oct.	3,251	3,217	-34	3,085	1,629	1,612	-17	2,523
Nov.	3,239	3,200	-39	3,208	1,736	1,716	-20	2,795
Dec.	3,221	3,238	17	3,725	1,894	1,903	9	3,022
Average	3,152	3,169	16	3,327	1,687	1,695	8	2,834

1980

Month	Distillate Fuel Oil				Residual Fuel Oil			
	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied
Jan.	3,013	3,093	80	3,794	1,771	1,812	41	3,108
Feb.	2,766	2,888	122	3,834	1,773	1,836	63	3,168
Mar.	2,557	2,690	133	3,312	1,584	1,652	68	2,726
Apr.	2,460	2,554	94	2,729	1,595	1,643	48	2,492
May	2,474	2,610	136	2,538	1,509	1,579	70	2,305
Jun.	2,646	2,721	75	2,392	1,575	1,613	38	2,359
Jul.	2,689	2,783	94	2,343	1,480	1,528	48	2,339
Aug.	2,461	2,582	121	2,258	1,444	1,506	62	2,348
Sep.	2,686	2,726	40	2,627	1,495	1,516	21	2,380
Oct.	2,589	2,650	61	2,981	1,512	1,543	31	2,258
Nov.	2,703	2,823	120	3,069	1,579	1,641	62	2,513
Dec.	2,891	3,052	161	3,776	1,660	1,743	83	2,762
Average	2,661	2,764	103	2,969	1,580	1,634	54	2,562

Total Petroleum Products

The imbalance between the supply and disposition of unfinished oils is now reported as part of the reclassified products (line 39) in the U.S. Petroleum Balance (Table 1). Imbalances between the supply and disposition of gasoline blending components comprise the remainder of the reclassified in Table 1. These imbalances are reported as negative product supplied in the Other Liquids section of the table of Supply and Disposition Statistics (Table 2). Since these changes only involve redistribution of the volumes of gasoline, distillate and residual fuel oil, gasoline blending components, and unfinished oils, the total volume of petroleum products supplied remains unaffected by them.

Note 5 Notes on Tables

5.1 Crude Oil and Petroleum Products Overview statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Crude Oil and Petroleum Products Stock Withdrawal (+) or Addition (-), Petroleum Products Supplied, Total Imports, Crude Oil Imports, Total Exports, and Crude Oil Exports appear as labeled in Table 4. Total Production and Crude Oil Production appear under Field Production in Table 4.
- Natural Gas Plant Production is the sum of Natural Gas Plant Liquids and Finished Petroleum Products Field Production in Table 4.
- Petroleum Products Imports is the sum of Natural Gas Plant Liquids and LRGs, Other Liquids, and Finished Petroleum Products Imports in Table 4.
- Petroleum Products Exports is the sum of Natural Gas Plant Liquids and LRGs, Other Liquids, and Finished Petroleum Products Exports in Table 4.
- Total Crude Oil and Petroleum Products Ending Stocks appear in thousands of barrels in Table 2.

5.2 Crude Oil Supply and Disposition statistics on the referenced line appear in Table 1 of the Detailed Statistics, except where noted.

- Total Domestic Field Production, Alaskan Field Production, SPR Imports, Other Imports (synonymous with Imports Gross Excl. SPR), SPR and Other Primary Stocks Withdrawal (+) or Addition (-), Unaccounted For Crude Oil, Refinery Inputs, and Exports appear as labeled in Table 1.
- SPR Ending Stocks and Other Primary Ending Stocks (synonymous with stocks excluding SPR) appear in thousands of barrels in Table 1.
- Total Crude Oil Ending Stocks appear in thousands of barrels in Table 2.
- Total Imports appear in Table 4.

5.3 Finished Motor Gasoline Supply and Disposition statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.
- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.
- Unleaded Percent of Total Product Supplied represents the ratio of finished unleaded motor gasoline product supplied to total finished motor gasoline product supplied, multiplied by 100 and rounded to the nearest tenth.
- Ending Stocks appear in thousands of barrels in Table 2.

5.4 Distillate and Residual Fuel Oil Supply and Disposition statistics on the referenced lines appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.
- Imports, Stock Withdrawal (+) or Addition (-), Crude Used Directly, Exports, and Product Supplied appear as labeled in Table 4.
- Ending Stocks appear in thousands of barrels in Table 2.

5.5 Liquefied Petroleum Gases and Ethane statistics represent the aggregation of statistics on ethane, propane, butane, butane-propane mixtures, ethane-propane mixtures, and isobutane. The statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.
- Imports, Stock Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied appear as labeled in Table 4.
- Ending stocks appear in thousands of barrels in Table 2.

5.6 Other Petroleum Products Supply and Disposition statistics represent the aggregation of statistics on natural gasoline, isopentane, unfractionated stream, plant condensate, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, and residual fuel oil. The statistics on the referenced line are aggregated from Table 4 of the Detailed Statistics, except where noted.

- Total Production is the aggregated sum of Field Production and Refinery Production in Table 4.
- Imports, Stock Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied are aggregated from Table 4.
- Ending stocks are aggregated from ending stocks in thousands of barrels in Table 2.

Note 5.7 Table 1. U.S. Petroleum Balance

- Lines (1) through (3) of Table 1: Crude oil (including lease condensate) production for "Alaska," "Lower 48 States," and "Total U.S." are calculated by calling the conservation agency in Alaska for Alaskan crude oil production during the month, estimating crude oil production in the United States (see Explanatory Note 2.2), and taking the difference to equal production in the lower 48 states.
- Line (5) of Table 1: SPR imports are reported on Survey Form ERA-60.
- Line (12) of Table 1: "Total Other Sources" equals crude oil stock withdrawal (+) or addition (-) plus unaccounted for crude oil plus crude used as fuel and losses in Table 2.
- Line (14) of Table 1: Natural gas plant liquids (NGPL) "Production" equals field production of natural gas plant liquids (NGPL) plus field production of finished petroleum products in Table 2.
- Line (15) of Table 1: NGPL "Imports" equals the sum of the imports of natural gasoline and isopentane, unfractionated stream, and plant condensate imports in Table 2.
- Line (16) of Table 1: NGPL "Stock Withdrawal (+) or Addition (-)" is equal to the sum of stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate in Table 2.
- Line (17) of Table 1 equals the sum of lines (14), (15), and (16) of Table 1.
- Line (18) of Table 1: unfinished oils and gasoline blending components "Stock Withdrawal (+) or Addition (-)" equals stock withdrawal (+) or addition (-) for other hydrocarbons and alcohol, for unfinished oils, motor gasoline blending components, and aviation gasoline blending components.
- Line (20) of Table 1: "Other Hydrocarbons and Alcohol New Supply" equals the field production of same in Table 2.
- Line (21) on Table 1: "Refinery Processing Gain" is a balancing item equal to total refinery production minus total refinery input in Table 2.
- Line (22) on Table 1: "Crude Used Directly" equals the sum of crude oil used directly as distillate and residual fuel oils in Table 2.
- Line (23) of Table 1: "Total Other Liquids" equals the sum of lines (18) through (22) of Table 1.
- Line (24) of Table 1: "Total Production of Products" equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or

addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; plus crude oil used as distillate and residual fuel oils in Table 2.

- Line (25) of Table 1: "Gross Imports of Refined Products" equals imports of LPG and ethane plus imports of finished petroleum products in Table 2.

- Line (26) of Table 1: "Exports of Refined Products" equals exports of LPG and ethane plus exports of finished petroleum products in Table 2.

- Line (27) of Table 1: "Net Imports of Refined Products" equals the difference between lines (25) and (26) of Table (1).

- Line (28) of Table 1: "Total New Supply of Products" equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; plus crude oil used as distillate and residual fuel oils; plus imports of LPG and ethane and finished petroleum products; minus exports of LPG and ethane and finished petroleum products in Table 2.

- Line (29) of Table 1: "Refined Products Stocks Withdrawal (+) or Addition (-) equals the sum of stock withdrawal (+) or addition (-) for LPG and ethane, and finished petroleum products in Table 2.

- Line (30) of Table 1: "Total Petroleum Products Supplied for Domestic Use" equals total products supplied in Table 2.

- Lines (31) through (37) of Table 1 equal the respective products supplied in Table 2.

- Line (38) of Table 1: "Other Products Supplied" equals the sum of natural gasoline and isopentane, unfractionated stream, plant condensate, aviation gasoline, naphtha < 400 Deg. F for petrochemical feedstock uses, other oils > 400 Deg. F. for petrochemical feedstock use, special naphthas, lubricants, waxes, coke, asphalt, road oil, still gas, and miscellaneous products supplied in Table 2.

- Line (39) of Table 1: "Total Reclassified" is a balancing item equal to the sum of unfinished oils, motor gasoline blending components, and aviation gasoline blending components products supplied in Table 2.

- Line (40) of Table 1: "Total Product Supplied" is equal to total products supplied in Table 2.

- The sum of lines (41) and (42) of Table 1, stocks of "Crude Oil and Lease Condensate (Excluding SPR)" and stocks held by the "Strategic Petroleum Reserve," equals ending stocks of crude oil in Table 2. SPR stocks are reported on Form EIA-90.

- Line (46) of Table 1, stocks of "Refined Products," equals the sum of LPG and ethane and finished petroleum product stocks in Table 2.

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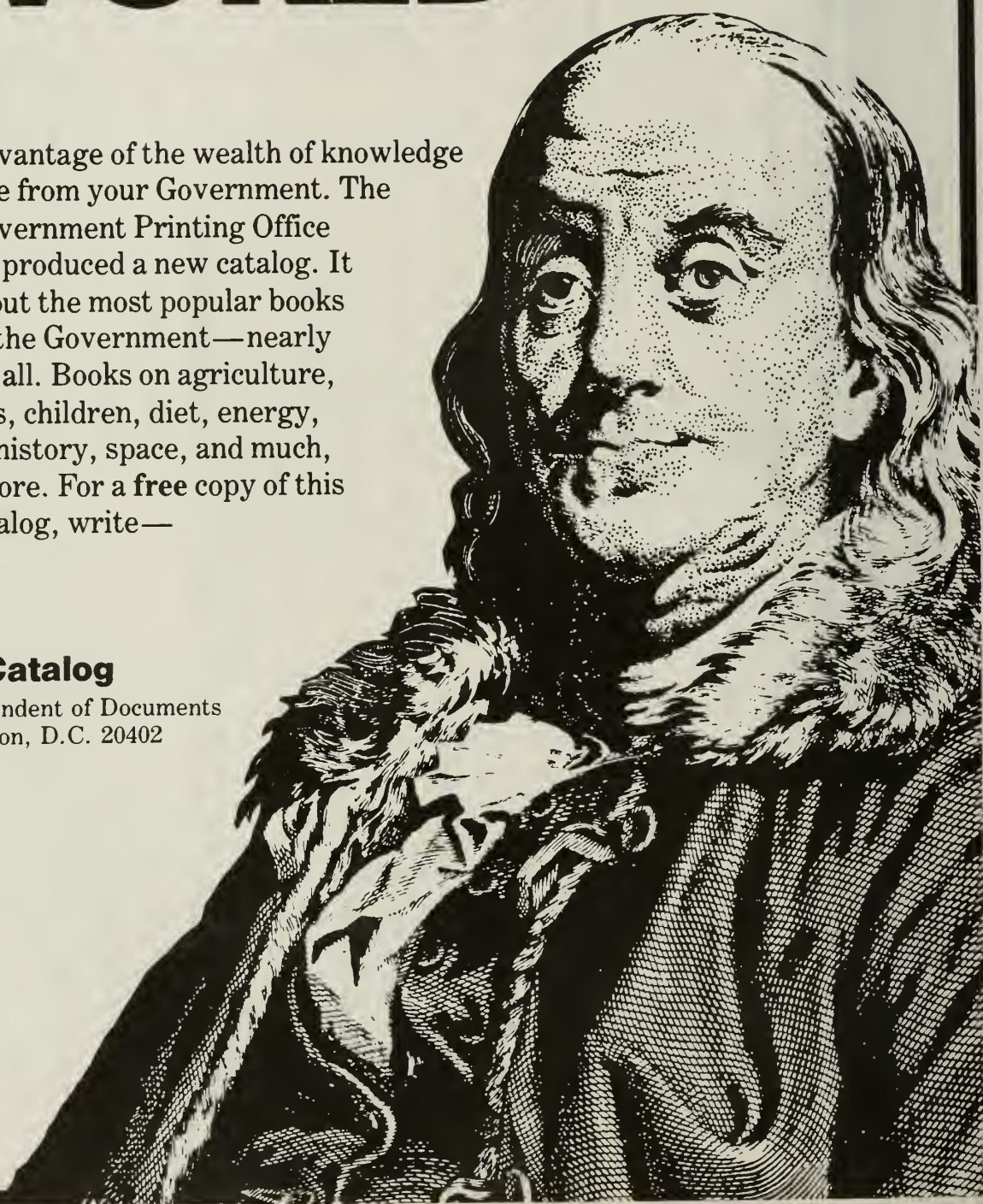
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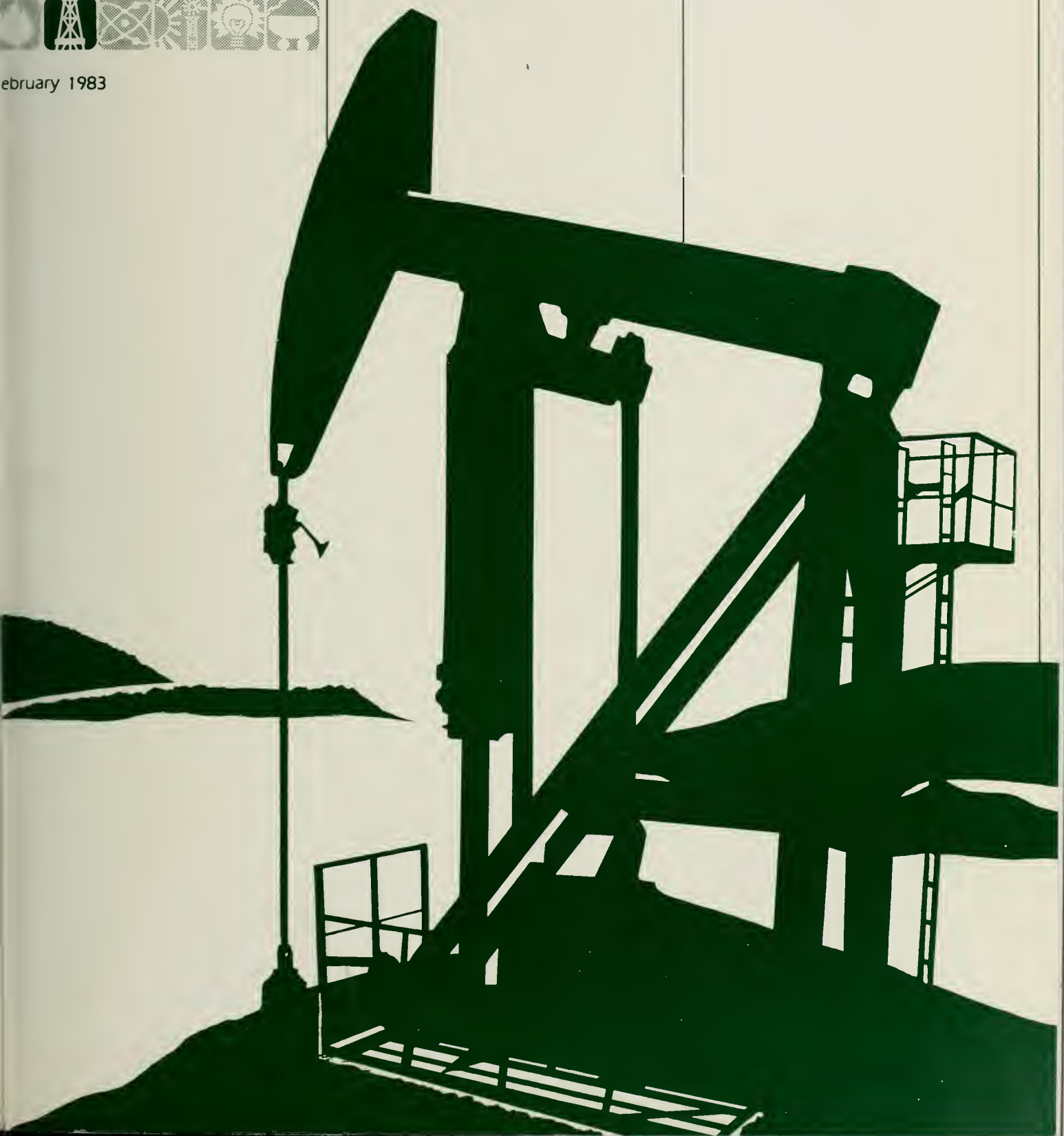
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February 1983





Petroleum Supply Monthly



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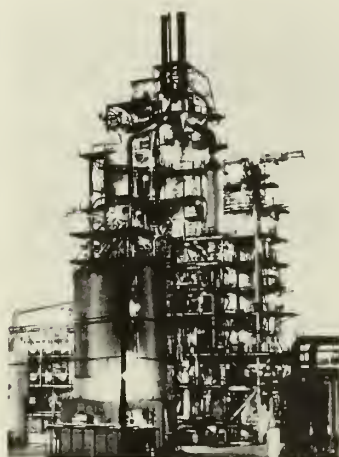
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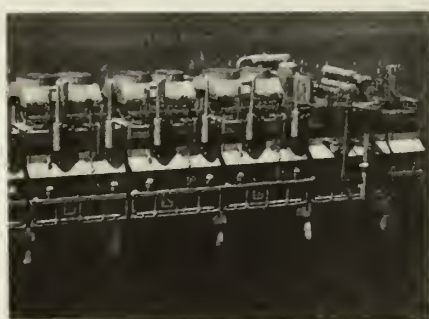


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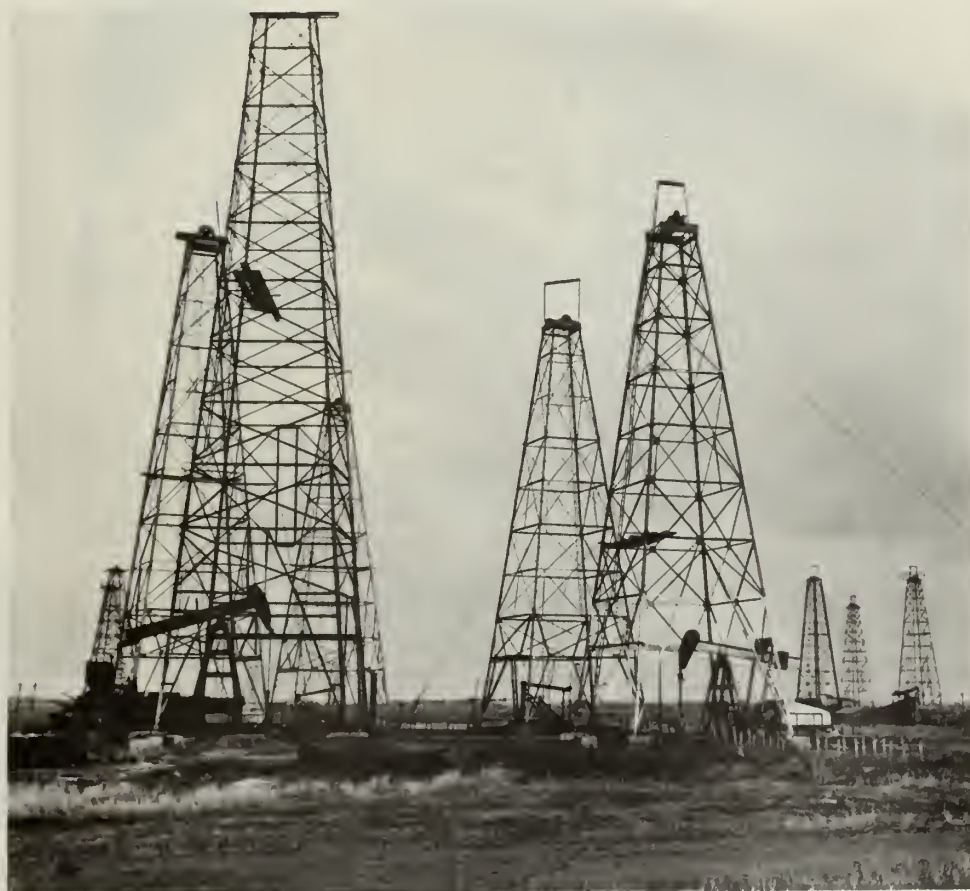
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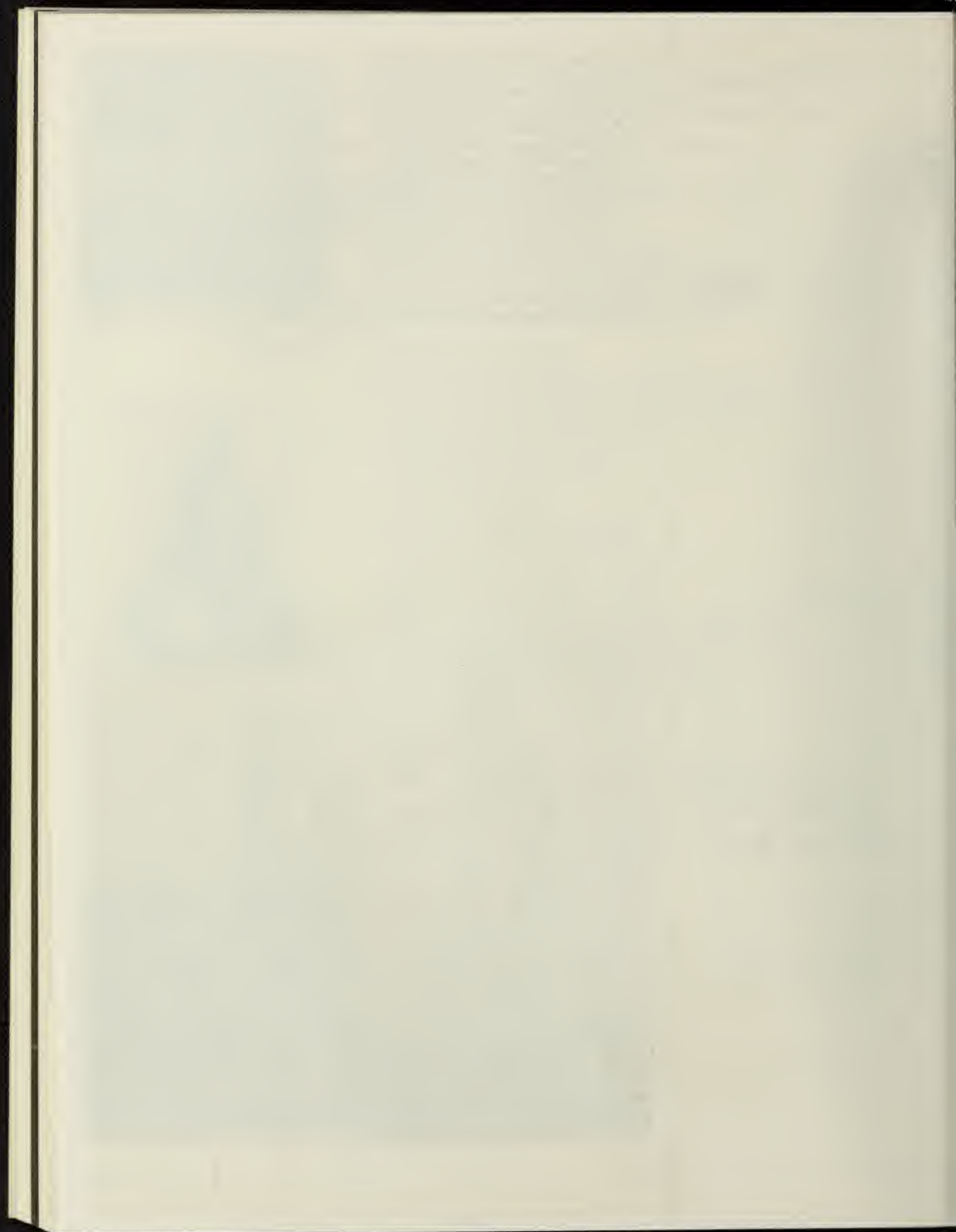
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Petroleum Focus



1840
1841



Petroleum Supply Summary

Average Volume for Period (Million Barrels Per Day)	January		% Change
	1983	1982	
Total Product Supplied	15.3	15.9	-3.6
Motor Gasoline	6.0	5.9	0.7
Distillate Fuel Oil	3.1	3.4	-10.4
Residual Fuel Oil	1.8	2.1	-15.1
Crude Inputs to Refineries	11.3	11.6	-3.0
Crude Oil and Natural Gas Liquids Production	10.3	10.2	0.5
Net Imports ¹	3.4	4.4	-21.8
Net Crude Oil Imports ²	2.6	3.2	-18.6
SPR Imports	0.2	0.2	11.2
Net Product Imports	0.6	1.0	-37.8
Crude Oil Stock Withdrawal ³	-0.09	-0.08	-
Product Stock Withdrawal	1.14	1.13	-
Stocks at End of Period (Million Barrels)			
Crude Oil ³	356	371	-4.0
Motor Gasoline ³	243	262	-7.4
Distillate Fuel Oil	160	166	-3.6
Residual Fuel Oil	56	68	-17.6
Total Product	758	855	-11.3
SPR	300	235	27.4
Total	1,414	1,461	-3.2

¹Gross imports of crude oil including Strategic Petroleum Reserve (SPR) and petroleum products less exports of crude oil and petroleum products.

²Excluding SPR.

³Including blending components.

Note: Percent changes are based on unrounded values. January 1983 data are estimates based on weekly data, except for export estimates which are December 1982 monthly values.

Source: Energy Information Administration, *Petroleum Supply Monthly*, February 1983.

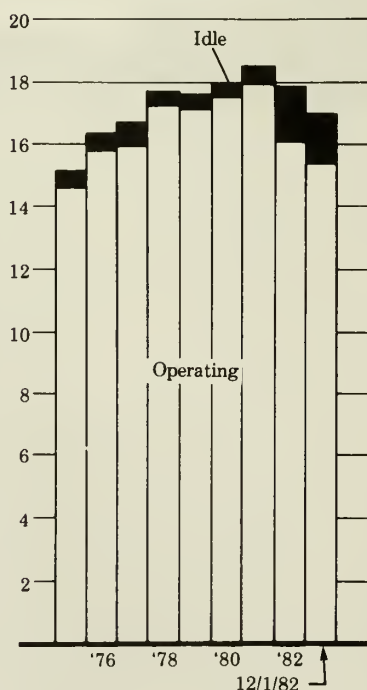
Refinery Shutdowns During 1982

During 1982, 57 refineries with more than 1.1 million barrels per calendar day of crude oil distillation capacity were shut down (see Table 1). In addition, at yearend, 1.5 million barrels per day of refinery capacity was reported as idle but capable of being brought into operation in 90 days (see figure 1).¹ The refinery closings in 1982 and the large reduction in U.S. refining capacity continued the trend started in 1981. During that year, 23 refineries with 451 thousand barrels per day of crude oil distillation capacity closed; in addition, 260 thousand barrels per day (net) of crude oil distillation capacity was shut down in refineries that remained operable. These shutdowns ended an uninterrupted trend in refinery capacity expansions that began in 1967.²

The refineries that were shut down during 1982 had some common characteristics (age, size, complexity, and location):

- About 40 percent of the refineries that were shut down had operated for 25 years or more. Another 40 percent of the refineries that were shut down were less than 5 years old.
- More than half of the refineries that were shut down had a crude oil distillation capacity of less than 10 thousand barrels per day, and 90 percent had a crude oil distillation capacity of less than 50 thousand barrels per day.
- More than 60 percent of the refineries that were shut down had no downstream processing capability.
- Most of the larger and older refineries that were shut down were in the Midwest and on the East Coast; most of the smaller and newer refineries that were shut down were on the Gulf Coast.

Figure 1. Operable Refinery Capacity as of January 1 (Million Barrels per Day)



Source: *Petroleum Supply Monthly*, January 1983; *Petroleum Supply Annual* 1981; *Location of Petroleum Refineries in the United States and U.S. Territories*, 1975-1980.

The 1982 refinery shutdowns were primarily the result of shifts in petroleum demand, economic factors, and changes in governmental regulations. Total petroleum consumption (measured as petroleum products supplied) decreased during 1982, but consumption of lighter products, such as gasoline and jet fuels, accounted for an increased share of the total. Smaller, less-complex refineries, which were unable to produce more light products from less-expensive, heavy, high-sulfur crude oil, were at an economic disadvantage. Many of these small refineries, which benefitted from lower crude oil prices under the Crude Oil Entitlements Program, became unprofitable when the program was phased out in early 1981.

The drop in refinery capacity is associated with a drop in petroleum products supplied. During the past 4 years, total petroleum products supplied

¹See explanatory notes for capacity definitions.

²Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0304(81) (Washington D.C.: 1981); Energy Information Administration, *Petroleum Refineries in the United States and U.S. Territories*, DOE/EIA-0111 (Washington D.C.: 1978, 1979, 1980, 1981).

dropped 19 percent, from 18.8 million barrels per day in 1978 to 15.2 million barrels per day in 1982 (see Figure 2). Refinery capacity peaked at 18.6 million barrels per day in January 1981, 3 years after petroleum products supplied peaked.³ During the past 2 years, refinery capacity has decreased 8 percent to 17.1 million barrels per day.⁴

Refinery Age

Twenty-three of the 57 refineries shut down during 1982 had been operating more than 25 years. These older refineries were located primarily in the East and Midwest (see Table 1). All three refineries shut down on the East Coast and 12 of the 14 refineries shut down in the Midwest had been operating more than 25 years.

Twenty-three of the shutdown refineries had been operating less than 5 years. Twenty of these newer refineries were in the Gulf Coast region. These refineries were built when the Crude Oil Entitlements Program was in effect (1974-1981). This Federal program gave small refiners a significant crude-oil-cost advantage over large refiners. When the Entitlements Program was eliminated, small refiners lost this advantage, and many closed.

Refinery Size

The refineries shut down during 1982 were, in general, smaller than those remaining in operation. As of January 1, 1982, the number of refineries with a capacity of 50 thousand barrels per day or less accounted for 67 percent of all refineries, but they accounted for about 90 percent of the number shut down.

The number of operable, smaller refineries has decreased significantly since 1980, while the number of larger refineries has decreased only slightly (see Figure 3). In 1980, there were 91 refineries with a capacity of 10 thousand barrels per day or less; by the end of 1982, there were only 44 operable refineries of this size. During the same period, the number of larger refineries (those with capacities over 175 thousand barrels per day) dropped from 27 to 22. The largest refinery that closed was the Dow Chemical U.S.A. refinery in Freeport, Texas, which had a capacity of 190 thousand barrels per day.

Refinery Complexity

The refineries that were shut down in 1982 were, in general, less complex than the average U.S. refinery (see Table 2). Thirty-six of the 57 shutdown refineries had no vacuum distillation, catalytic cracking, hydrocracking, catalytic hydrotreating, or catalytic hydrotreating equipment. These downstream processes are used to increase the output of light products, to remove sulfur and metals from a variety of feedstocks and to improve the quality and yield of gasoline. Several of the other 21 shutdown refineries were quite large and complex. Together all 21 had 1.1 million barrels per day of downstream facilities, 4 percent of the nation's total at the beginning of 1982.

Refineries with substantial downstream capabilities usually have an economic advantage over less complex refineries because of economies of scale and because they can produce more of the higher-priced, lighter products from less costly crude oil (i.e. heavy, high-sulfur). Because they lacked downstream flexibility, most of the shutdown refineries could process only sweet and light, low-sulfur crude oils. In early 1982, U.S. refiners projected that, on the average, 54 percent of their crude oil inputs during 1982 would be sweet, low-sulfur, and light, medium-sulfur crude oils. For approximately two-out-of-three of the shutdown refineries, owners projected that their crude oil inputs would be entirely sweet crude oil or light, medium-sulfur crude oil.

Most of the shutdown refineries were designed to produce less of the lighter transportation fuels and more of the heavier products such as residual fuel oil and asphalt than the national average. Average yields for the shutdown refineries, projected in January 1982 for the remainder of the year, were 41 percent motor gasoline, 18 percent distillate fuel oil, and 24 percent residual fuel oil. Average yields of these products for all U.S. refineries, projected in January 1982, were 47 percent, 18 percent, and 9 percent, respectively.⁵

³Energy Information Administration *Petroleum Supply Monthly*, DOE/EIA-0109(8302) Washington D.C.: February 1983). p. 18

⁴*Petroleum Supply Monthly*, Table 15.

⁵*Petroleum Supply Annual*, Table 7.

Table 1. Refineries Shutdown Between January 1, 1982 and December 1, 1982.

District/Refinery	Location	Crude Distillation Capacity (B/CD)	Total Downstream Capacity (B/SD)	Years in Operation
East Coast (PAD District I)				
Amoco Oil Co.	Baltimore, Maryland	15,000	0	25+
Ashland Oil, Inc.	Buffalo, New York	64,000	87,200	25+
Seminole Refining, Inc.	St. Marks, Florida	15,000	10,000	25+
Total		94,000	97,200	—
Midwest (PAD District II)				
Amoco Oil Co.	Sugar Creek, Missouri	104,000	185,500	25+
Ashland Oil, Inc.	Findlay, Ohio	20,400	12,000	25+
CRA, Inc.	Scottsbluff, Nebraska	5,600	3,650	25+
CRA, Inc.	Phillipsburg, Kansas	26,400	32,100	25+
Dillman Oil Recovery, Inc.	Oblong, Illinois	1,200	0	4
E-Z Serv Refining, Inc.	Shallow Water, Kansas	9,500	0	25+
Energy Cooperative, Inc.	East Chicago, Indiana	126,000	190,000	25+
Industrial Fuel & Asphalt of Indiana, Inc.	Hammond, Indiana	7,600	0	25+
Kentucky Oil & Refining Co.	Betsy Lane, Kentucky	3,000	0	25+
Mid-America Refining Co. Inc.	Chanute, Kansas	3,000	1,800	25+
Northland Oil & Refining Co.	Dickinson, North Dakota	5,000	0	7
Phillips Petroleum Co.	Kansas City, Kansas	80,000	156,700	25+
Texaco, Inc.	West Tulsa, Oklahoma	50,000	89,000	25+
Texas America Petrochemicals Inc.	West Branch, Michigan	11,500	3,200	25+
Total		453,200	673,950	—
Gulf Coast (PAD District III)				
Bayou State Oil Corp.	Hosston, Louisiana	3,000	0	25+
Bronco Refining Co.	Houston, Texas	2,250	0	1
Caribou-Four Corners Oil Co.	Kirtland, New Mexico	2,400	1,200	17
Clinton Manges	Palestine, Texas	6,000	0	25+
Copano Refining Co.	Ingleside, Texas	11,100	0	4
Dow Chemical U.S.A.	Freeport, Texas	190,000	143,000	1
Eagle Refining Corp.	Jacksboro, Texas	1,800	0	1
Giant Industries, Inc.	Farmington, New Mexico	13,500	5,000	7
Independent Refining Corp.	Pt. Neches, Texas	30,000	0	4
Independent Refining Corp.	Winnie, Texas	50,000	63,000	23
Lake Charles Refining Co.	Lake Charles, Louisiana	28,000	0	2
Listo Refining Co.	Donna, Texas	3,500	0	4
Longview Refining Co.	Longview, Texas	14,000	14,000	25+
Natchez Refining Co.	Natchez, Mississippi	16,000	0	2
Petraco-Valley Oil & Refining Co.	Brownsville, Texas	12,300	0	2
Placid Oil Co.	Mont Belvieu, Texas	8,500	0	2
Quitman Refining Co.	Quitman, Texas	6,600	0	4
Rio Grande Crude Refining	Brownsville, Texas	9,500	0	3
Rio Grande Recovery Systems, Inc.	Brownsville, Texas	1,000	0	2
Schulze Processing, Inc.	Tallulah, Louisiana	1,760	0	4
Sentry Refining, Inc.	Corpus Christi, Texas	25,000	0	4
Shepard Oil Co.	Jennings, Louisiana	10,000	0	4
Sooner Refining Co.	Darrow, Louisiana	8,000	32,200	2
T & S Refining, Inc.	Jennings, Louisiana	10,500	0	2
TARCO	Eules, Texas	6,000	0	20
Tipperary Refining Co.	Wickett, Texas	7,320	0	4
Vicksburg Refining Co.	Vicksburg, Mississippi	7,900	0	4
Wickett Refining Co.	Wickett, Texas	8,000	0	25+
Total		493,930	258,400	—

B/CD = Barrels per Calendar Day

B/SD = Barrels per Stream Day

Table 1. Refineries Shutdown Between January 1, 1982 and December 1, 1982 (Cont'd)

District/Refinery	Location	Crude Distillation Capacity (B/CD)	Total Downstream Capacity (B/SD)	Years in Operation
Rocky Mountain (PAD District IV)				
C & H Refinery, Inc.	Lusk, Wyoming	180	0	25+
Caribou-Four Corners Oil Co.	Woods Cross, Utah	7,200	5,400	19
Glacier Park Co.	Osage, Wyoming	10,000	0	4
Husky Oil Co.	Cody, Wyoming	11,500	17,800	25+
Morrison Petroleum Co.	Woods Cross, Utah	6,300	0	8
Sage Creek Refining Co.	Cowley, Wyoming	1,000	0	17
Texaco, Inc.	Casper, Wyoming	21,000	35,500	25+
Total		57,180	58,700	—
West Coast (PAD District V)				
Gibson Oil & Refining Co.	Bakersfield, California	4,600	0	3
Lunday-Thagard Oil Co.	South Gate, California	12,000	0	14
Sabre Oil & Refining, Inc.	Bakersfield, California	10,000	0	10
United Independent Oil Co.	Tacoma, Washington	730	0	7
West Coast Oil Co.	Oildale, California	21,000	0	25+
Total		48,330	0	—
U.S. Total		1,146,640	1,088,250	—

B/CD = Barrels per Calendar Day

B/SD = Barrels per Stream Day

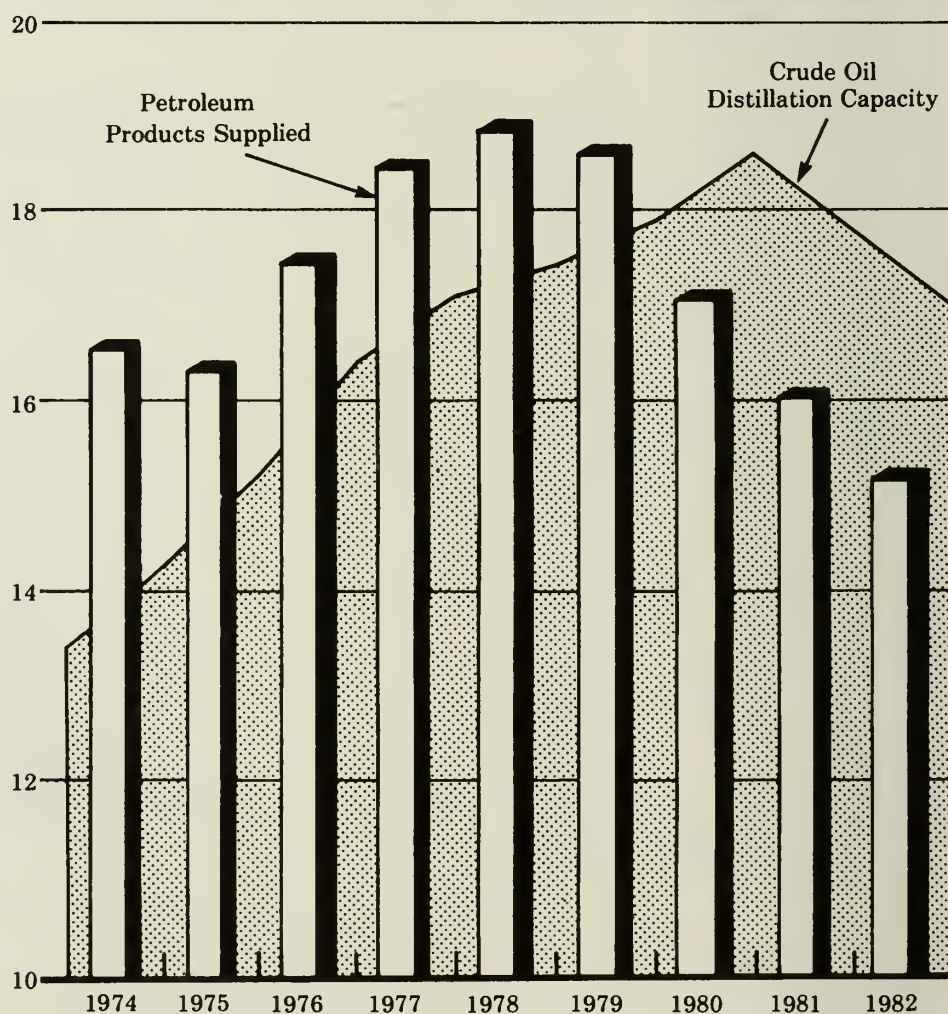
Table 2. Capacity of U.S. Refineries Compared with Capacity of Shutdown Refineries

Type of Capacity	Total U.S. Capacity ¹	Total Shutdown Capacity ¹	Shutdown as a Percent of Total Capacity
Crude Oil Distillation	17,889.7	1,146.6	6.4
Vacuum Distillation	7,197.2	241.1	3.3
Catalytic Cracking	6,035.9	223.2	3.7
Catalytic Reforming	3,966.3	129.5	3.3
Catalytic Hydrocracking	892.1	4.2	0.5
Catalytic Hydrorefining and Hydrotreating	8,539.4	460.3	5.4

¹Capacity as of January 1, 1982.

Note: Crude oil distillation capacity in thousand barrels per calendar day; all other types of capacity in thousand barrels per stream day.

Figure 2. U.S. Refinery Capacity and Petroleum Products Supplied (Million Barrels per Day)



Source: *Petroleum Supply Monthly* 1982; *Petroleum Supply Annual* 1981; *Petroleum Statement Annual* 1975-1979.

Refinery Location

Almost half of the refineries that closed during 1982 were in the Gulf Coast region, which had 46 percent of the nation's crude oil distillation capacity at the beginning of 1982. The closings there accounted for 494 thousand barrels per day, 6 percent of the region's capacity and 43 percent of the total amount shutdown in 1982. However, at the end of 1982, the Gulf Coast had increased its share of the U.S. crude oil distillation capacity from 46 percent to 47 percent (see Table 3).

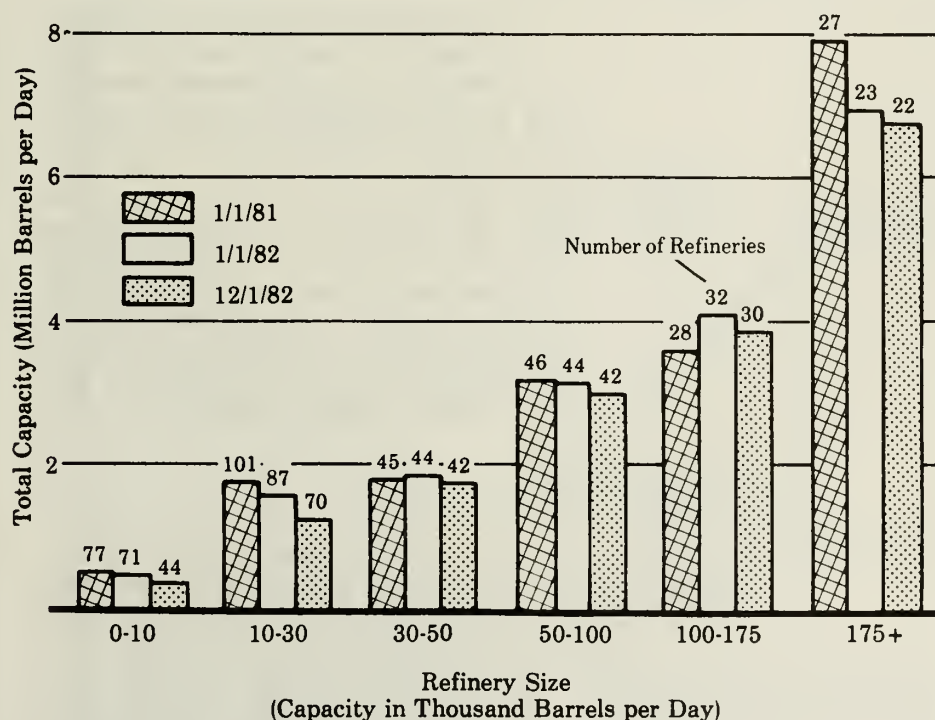
The Midwest, which had 23 percent of U.S. crude oil distillation capacity at the beginning of 1982, had 14 refineries shut down and lost 453 thousand barrels per day, 11 percent of the region's capacity and 40 percent of the total amount shutdown in 1982. This was the largest percentage loss of capacity for any region. During 1982, the Midwest region's share of U.S. distillation capacity dropped from 23 percent to 21 percent.

In the 3 remaining regions, East Coast, Rocky Mountain, and West Coast, the refinery shutdowns accounted for 94 thousand, 57 thousand, and 48 thousand barrels per day, respectively. Between January 1, 1982, and December 31, 1982, the East Coast's and the Rocky Mountain's shares of capacity remained about the same at about 10 percent and about 3.5 percent, respectively. During the same period, the West Coast's share of U.S. crude oil distillation capacity grew slightly from 17.5 percent to 18.6 percent.

Conclusion

During 1982, 57 of the 301 refineries that were operable at the beginning of the year were shut down. These shutdown refineries had a crude oil distillation capacity of 1.1 million barrels per day, 6 percent of the distillation capacity on January 1, 1982. Also at these locations, 1.1 million barrels per day of downstream facilities were closed (4 percent of the nation's total). The shutdown refineries can be divided into two

Figure 3. U.S. Refinery Capacity by Refinery Size



Source: Forms EIA-177 (1981), EIA-87 (1982)

major age categories: a group of older refineries which had been in operation 25 years or more; and a group of newer refineries which had been in operation less than 5 years and which tended to be smaller and less complex than the average U.S. refinery. The net result of refin-

ery shutdowns and additions during 1982 was a shift in the shares of U.S. crude oil distillation capacity predominantly to the Gulf Coast, to a lesser extent to the West Coast, and away from the Midwest.

Table 3. Refinery Capacity by Region
(Thousand Barrels per Calendar Day)

	East Coast (PADD 1)	Midwest (PADD 2)	Gulf Coast (PADD 3)	Rocky Mountain (PADD 4)	West Coast (PADD 5)	U.S. Total
Total Capacity (Jan 1, 1982)	1,825	4,035	8,271	635	3,124	17,890
1982 Shutdowns	94	453	494	57	48	1,147
1982 Net Additions	31	-23	162	11	83	264
Total Capacity (Dec. 1, 1982)	1,762	3,559	7,939	589	3,159	17,008

Totals may not equal sum of components due to independent rounding.

U.S. Petroleum Imports and Exports

The major developments in U.S. trade during 1982 were the continued sharp decline of crude oil imports, the emergence of Mexico as the leading foreign supplier of petroleum to the United States, and the growth in petroleum product exports to the highest level ever. The decrease in imports and the shift in supply sources continue the recent trend toward greater U.S. oil supply security. Because domestic production has remained fairly constant, the drop in imports is associated with the decline in domestic demand.

Imports

During 1982, gross U.S. imports (crude oil and petroleum products) averaged 5.0 million barrels per day, continuing the downward trend since 1979. Imports had peaked earlier in 1977 at an average of 8.8 million barrels per day (see Figure 4).¹ The 1982 imports level was 43 percent below the 1977 peak and 16 percent below the 1981 level.

Three major factors contributed to the declining U.S. dependence on petroleum imports:

- **Price-induced Conservation.** Real fuel price increases in 1979, 1980, and 1981, spurred conservation. The refiner acquisition cost of imported crude oil for 1981 averaged \$37.05 per barrel, approximately 2.5 times the 1977 price.² Although the refiner acquisition cost of crude oil dropped in 1982, new automobile efficiencies, better-insulated buildings, and other similar investments in conservation contributed to lower petroleum consumption during 1982.
- **Stock Withdrawals.** Withdrawals from petroleum inventories (excluding the Strategic Petroleum Reserve [SPR] inventories) averaged 337 thousand barrels per day. This is substantially greater than the 176-thousand-barrel-per-day

¹Energy Information Administration, *Petroleum Supply Monthly*, DOE/EIA-0109(83/02) (Washington D.C.: February 1983), p. 19.

²Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(83/01) (Washington, D.C.: January 1982), p. 80.

drawdown (excluding SPR) during 1981.

- **Economic Activity.** The low level of economic activity contributed to the 5-percent decline in petroleum consumption (measured as products supplied for domestic use) during 1982.

Total petroleum imports peaked in 1977, declined in 1978, increased in 1979, and then declined each subsequent year (see Figure 4). While import quantities have declined since 1977 their values increased and attained a record level of \$79 billion dollars in 1980 (see Figure 5).³ During 1982, both import quantities and their values declined. The divergence in quantities and values in 1979 and 1980 reflects the rapid rise in cost per barrel for petroleum imports. The refiner acquisition cost of imported crude oil averaged \$14.55 per barrel for the 1977-1978 period; then

the cost rose to \$21.67 per barrel in 1979 and continued to increase to a peak average of \$37.05 per barrel in 1981. Preliminary statistics indicate that the average price during 1982 was about \$3 per barrel lower.⁴

Crude oil imports averaged 3.5 million barrels per day in 1982, 48 percent below the 1977 average and 21 percent below the 1981 average. This decline occurred despite imports for the SPR which averaged 165 thousand barrels per day, compared with 21 thousand barrels per day during 1977.⁵

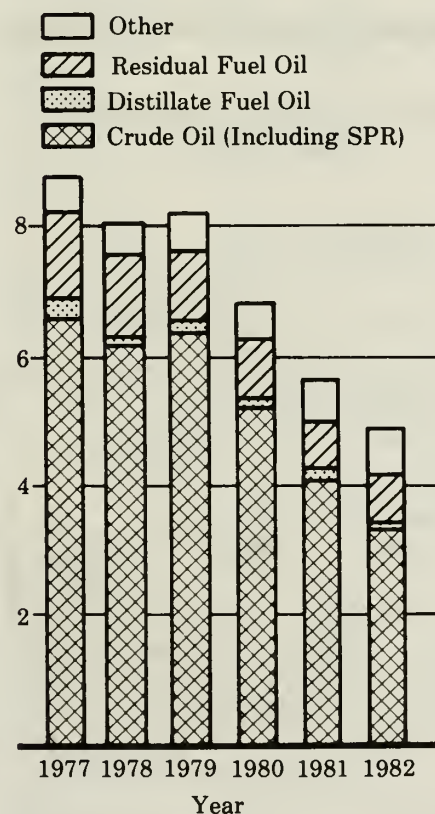
Petroleum product imports declined slightly during 1982. Residual fuel oil imports have declined consistently since

³Department of Commerce, Bureau of the Census, *Summary of U.S. Export and Import Merchandise Trade*, FT-900 (Washington, D.C.: December 1977-82).

⁴*Monthly Energy Review*, p. 80.

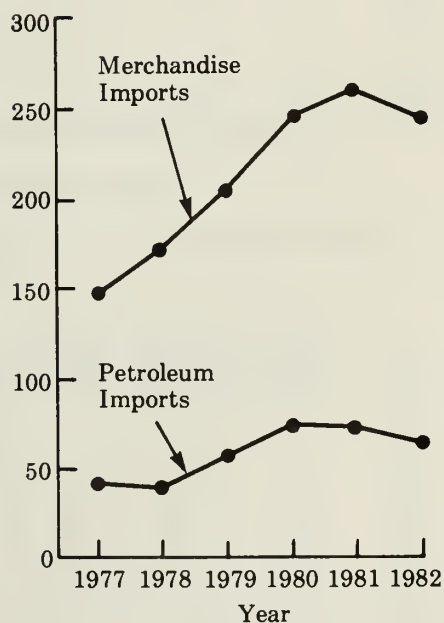
⁵*Petroleum Supply Monthly*, p. 22.

Figure 4. Petroleum Imports
(Million Barrels per Day)



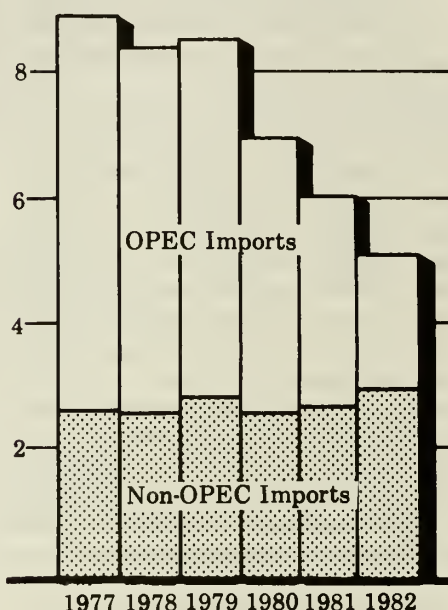
Source: *Petroleum Supply Monthly*, February 1983

Figure 5. Value of Petroleum and Merchandise Imports,
(Billion Dollars)



Source: U.S. Department of Commerce, Bureau of the Census, "Summary of U.S. Export and Import Merchandise Trade." FT 900.

Figure 6. U.S. Imports from OPEC and Non-OPEC Sources
(Million Barrels per Day)



Source: *Petroleum Supply Monthly*, February 1983

1976; they averaged 758 thousand barrels per day in 1982, 5 percent below the average for 1981 and 46 percent below the peak for 1976.⁶ This decline is attributable mainly to the decreased demand for residual fuel oil because of fuel switching, especially in the electric-utility sector and reduced industrial activity. The industrial and electric utility sectors account for about two-thirds of residual fuel oil consumption.

Distillate fuel oil imports averaged 93 thousand barrels per day during 1982, 46 percent below the 1981 level and 63 percent below the 1977 level.⁷ Distillate fuel oils are used primarily for diesel-engine fuel, space heating, and electric power generation. The economic recession contributed to the drop in distillate fuel oil imports.

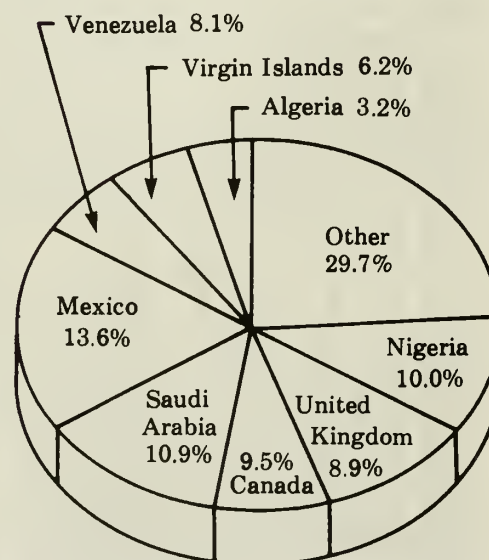
Declining Reliance on OPEC Imports

During the past 5 years, the relative importance of foreign sources as suppliers of U.S. imports has changed. Members of the Organization of Petroleum Exporting Countries (OPEC), Saudi Arabia in particular, have become less dominant as U.S. suppliers, while non-OPEC countries, especially Mexico and the United Kingdom, have become more important.

Through the mid-1970's, the volumes of U.S. imports from OPEC countries grew steadily to a peak average during 1977 of 6.2 million barrels per day, nearly 70 percent of the U.S. total. That year Saudi Arabia and Nigeria each exported more than 1 million barrels per day of petroleum to the United States, while Venezuela and Libya each exported about 700 thousand barrels per day to the United States.⁸

U.S. imports from OPEC countries have dropped off substantially since 1978. During 1982, OPEC supplied 2.1 million barrels per day, about 42 percent of the U.S. import total. Saudi Arabia and Nigeria each provided less than half of the amounts that they did in 1978. Other OPEC countries showed similar decreases. U.S. imports from Algeria, over 600 thousand barrels per day in 1978,

Figure 7. Petroleum Imports by Source, 1982.



Source: *Petroleum Supply Monthly*, February 1983

⁶*Petroleum Supply Monthly*, p. 32.

⁷*Petroleum Supply Monthly*, p. 27.

⁸*Petroleum Supply Monthly*, p. 37

were down to 161 thousand barrels per day in 1982, and imports from Venezuela were down to 408 thousand barrels per day. Petroleum imports from Iran, over 500 thousand barrels per day in 1978, were cut off in early 1980 and were resumed in June 1982 and averaged 35 thousand barrels per day in 1982.⁹ Crude oil imports from Libya were eliminated by a U.S. embargo in the spring of 1982.

U.S. petroleum imports from non-OPEC countries have grown only slightly in volume since 1978, but they have come to represent a far larger share of the U.S. total. In 1978, non-OPEC countries supplied 2.6 million barrels per day, or about 30 percent of U.S. imports. That

year, U.S. imports from Canada, at 467 thousand barrels per day, were the largest from any non-OPEC country.¹⁰ By 1982, petroleum imports from non-OPEC countries of 2.9 million barrels per day represented 58 percent of U.S. imports. During 1980, Mexico became the largest non-OPEC supplier of petroleum to the United States. By 1982, Mexico was exporting an average of 684 thousand barrels per day of petroleum

⁹*Petroleum Supply Monthly*, p. 37.

¹⁰Energy Information Administration, *Supply, Disposition, and Stocks of All Oils by Petroleum Administration for Defense Districts, and Imports of Petroleum, by County, Annual*, (Washington D.C.: 1977-1981); *Petroleum Supply Monthly*, p. 38.

Table 4. Imports of Crude Oil and Petroleum Products by Country of Origin, 1982.
(Thousand Barrels per Day)

	Crude Oil	Residual Fuel Oil	LPG and Ethane	Finished Motor Gasoline	Distillate Fuel Oil	Other Products	Total Imports
Mexico	644	22	17	(s)	1	1	684
Saudi Arabia	527	2	3	0	0	15	548
Nigeria	502	3	0	0	(s)	(s)	505
Canada	213	23	193	7	9	31	477
United Kingdom	436	4	1	3	0	6	451
Venezuela	154	203	2	4	5	40	408
Virgin Islands	0	122	0	59	52	82	315
Indonesia	223	8	4	7	3	(s)	245
Netherlands							
Antilles	0	139	0	5	1	28	173
Algeria	85	67	2	0	1	6	161
Other							
Countries	676	165	3	101	21	110	1,077
Total	3,460	758	225	186	93	319	5,041

Source: *Petroleum Supply Monthly* (March 1982 through February 1983), Table 21.

(s)=less than one half unit.

Totals may not equal sum of components due to independent rounding.

Table 5. U.S. Exports of Crude Oil and Petroleum Products by Country of Destination, 1982
(Thousand Barrels per Day)

	Crude Oil	Residual Fuel Oil	Petroleum Coke	Distillate Fuel Oil	LPG and Ethane	Other Products	Total
Virgin Islands	113	2	(s)	1	(s)	(s)	116
Puerto Rico	72	14	1	(s)	1	7	95
Canada	36	11	9	(s)	24	5	85
Netherlands	0	47	22	9	5	2	85
Japan	0	15	35	15	(s)	3	68
Mexico	0	1	1	12	20	19	53
Italy	0	8	14	2	3	5	32
Korea							
Republic of	0	23	1	4	(s)	(s)	28
Spain	0	2	18	1	(s)	3	24
France	0	3	10	4	3	4	24
Other Countries	15	83	45	26	9	27	206
Total	236	209	156	74	65	75	815

Source: *Petroleum Supply Monthly* (March 1982 through February 1983), Table 23.

(s)=less than one half unit.

Totals may not equal sum of components due to independent rounding.

to the United States, more than any other country. Canada, with 477 thousand barrels per day, and the United Kingdom with 451 thousand barrels per day, were the second and third largest non-OPEC suppliers.¹¹

Price was a major reason for the U.S. shift to petroleum imports from non-OPEC sources. In 1978, the landed costs of crude oil imports from most major foreign suppliers were within one dollar of each other, with Saudi Arabian crude oil at \$13.92, Nigerian crude oil at \$14.86, Mexican crude oil at \$13.54, and Canadian crude oil at \$14.50 per barrel. By 1982, the price differences between OPEC and non-OPEC crude oils were much greater. Non-OPEC crude oils were consistently less expensive than the crude oils from OPEC countries. In October 1982, the landed costs of Saudi Arabian and Nigerian crude oils were, respectively, \$35.21 per barrel and \$36.09 per barrel; while the landed costs of crude oils from Canada, Mexico, and

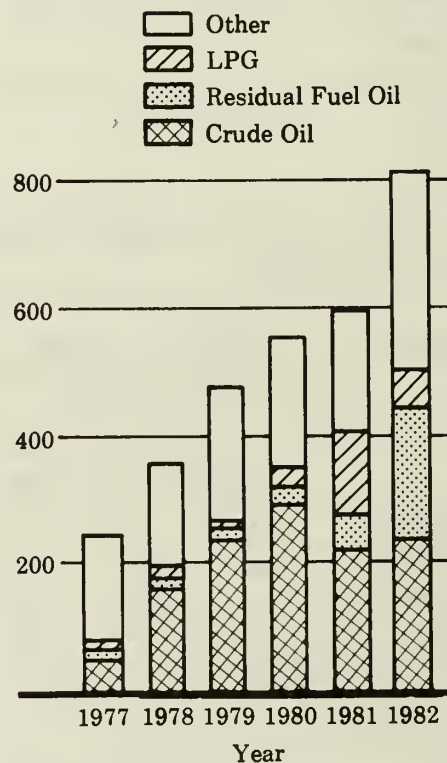
the United Kingdom were \$26.94, \$28.32, and \$34.24 per barrel, respectively.¹²

Exports

During 1982, total petroleum exports averaged 815 thousand barrels per day. Refined product exports made up about 70 percent of this total, and crude oil exports made up the remaining 30 percent. U.S. petroleum exports have increased sharply over the past 5 years, from 243 thousand barrels per day during 1977, to 544 thousand barrels per day in 1980, and to the 1982 level of 815 thousand barrels a day, the highest petroleum export level ever.¹³ These increases were primarily in exports of petroleum products. A major reason for the 1982 growth in product exports was the relaxation of product export restrictions in 1981. The total value of the petroleum exported by the United States during 1982 was \$5.9 billion.¹⁴

Exports of petroleum products averaged 579 thousand barrels per day during 1982, 124 percent above the 1980 average, and 200 percent above the 1977 average. Residual fuel oil, petroleum coke, distillate fuel oil, and liquefied petroleum gases (LPG) were the major products exported by the United States. Western Europe, Japan, Canada, and Mexico were the major recipients of U.S. exports (see Table 5). During 1982 U.S. exports of residual fuel oil averaged 209 thousand barrels per day; 22 percent of these exports went to the Netherlands. Petroleum coke exports averaged 156 thousand barrels per day during 1982; 22 percent of these exports went to Japan. Distillate fuel oil exports during 1982 averaged 74 thousand barrels per day; 20 percent of these exports went to Japan and another 16 percent went to Mexico. LPG exports during 1982 averaged 65 thousand barrels per day; 37 percent of these exports went to Canada and another 31 percent went to Mexico.¹⁵ These four products together

Figure 8. Petroleum Exports
(Thousand Barrels per Day)



Source: *Petroleum Supply Monthly*, February 1983

¹¹*Petroleum Supply Monthly*, p. 38.

¹²*Monthly Energy Review*, p. 83.

¹³*Petroleum Supply Monthly*, p. 19.

¹⁴Bureau of the Census, *Highlights of U.S. Import and Export Trade*, Annual, FT-990 (Washington, D.C.: 1982), Table E-2.

¹⁵*Petroleum Supply Monthly*, Table 23.

made up more than 85 percent of the 1982 petroleum product export total.

During 1982, crude oil exports averaged 236 thousand barrels per day, just 8 thousand barrels per day more than was exported during 1981. The 1982 crude oil exports consisted of 200 thousand barrels per day shipped to U.S. territories (including Puerto Rico, the Virgin Islands, and the Hawaiian Foreign Trade Zone) and 36 thousand barrels exchanged with Canada on a barrel-for-barrel basis for crude oil of comparable

quality. Although exports are actually prohibited by law, the tracking system for imports and exports counts these shipments and exchanges as exports.

Outlook

The downward trend in petroleum imports is not expected to continue. However, future import levels will depend to a large extent on changes in economic activity, crude oil availability, and prices.

The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations (1) for arbitrary values of the parameters α and β . It is shown that the system of equations (1) has solutions for arbitrary values of the parameters α and β if and only if the condition $\alpha + \beta = 1$ is satisfied. In this case the solutions of the system of equations (1) are given by the formulas

$$x = \frac{1}{\alpha} \ln \frac{1}{1 - \alpha} \quad \text{and} \quad y = \frac{1}{\beta} \ln \frac{1}{1 - \beta}$$

where α and β are arbitrary constants satisfying the condition $\alpha + \beta = 1$. The second part of the paper is devoted to a detailed analysis of the properties of the solutions of the system of equations (1) for arbitrary values of the parameters α and β . It is shown that the solutions of the system of equations (1) are unique and stable with respect to the initial conditions. The third part of the paper is devoted to a numerical analysis of the solutions of the system of equations (1) for arbitrary values of the parameters α and β . It is shown that the solutions of the system of equations (1) can be calculated with high accuracy using the Runge-Kutta method.

Summary Statistics



Crude Oil¹ and Petroleum Products Overview

		Field Production			Stock Withdrawal ²			Ending Stocks ³
		Total Domestic ⁴	Crude Oil	Natural Gas Plant Production	Crude Oil ⁵	Petroleum Products	Petroleum Products Supplied	Crude Oil ⁵ and Petroleum Products
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	10,975	9,208	1,738	11	-146	17,308	1,008
1974	AVERAGE	10,498	8,774	1,688	-62	-117	16,653	1,074
1975	AVERAGE	10,045	8,375	1,633	-17	-145	16,322	1,133
1976	AVERAGE	9,774	8,132	1,603	-39	96	17,461	1,112
1977	AVERAGE	9,913	8,245	1,618	-170	-378	18,431	1,312
1978	AVERAGE	10,328	8,707	1,567	-78	172	18,847	1,278
1979	AVERAGE	10,179	8,552	1,584	-148	-25	18,513	1,341
1980	AVERAGE	10,214	8,597	1,573	-98	-42	17,056	1,392
1981	January	10,231	8,540	1,652	50	1,159	18,430	1,388
	February	10,294	8,604	1,653	-278	250	16,989	1,389
	March	10,272	8,613	1,624	-632	224	15,907	1,401
	April	10,195	8,557	1,599	-595	148	15,350	1,415
	May	10,160	8,501	1,593	-391	-374	15,353	1,438
	June	10,287	8,629	1,594	-135	406	16,095	1,430
	July	10,098	8,500	1,548	-360	91	15,682	1,439
	August	10,243	8,583	1,614	397	-999	15,263	1,457
	September	10,281	8,604	1,612	-285	-341	15,655	1,476
	October	10,225	8,563	1,598	-760	477	15,822	1,485
	November	10,269	8,586	1,630	-325	-233	15,593	1,501
	December	10,220	8,585	1,590	-170	745	16,596	1,484
	AVERAGE	10,230	8,572	1,609	-290	130	16,058	
1982	January	10,257	8,669	1,548	-236	1,129	15,890	1,461
	February	10,261	8,690	1,524	-216	1,268	15,941	1,431
	March	10,212	8,597	1,570	-65	1,049	15,560	1,401
	April	10,296	8,652	1,588	107	1,594	16,048	1,350
	May	10,223	8,660	1,520	49	-34	14,845	1,349
	June	10,242	8,681	1,505	86	-515	14,931	1,362
	July	10,228	8,649	1,521	-155	-865	14,771	1,394
	August	10,301	8,701	1,543	-440	4	14,838	1,407
	September	10,306	8,733	1,513	252	-489	14,921	1,415
	October	10,283	8,676	1,540	-564	-55	14,820	1,434
	November	10,377	8,690	1,634	-357	-357	15,031	1,455
	December*	10,348	8,660	R 1,638	R 143	R 703	R 15,508	R 1,429
	AVERAGE	10,278	8,671	1,554	-117	280	15,253	
1983	January**	NA	8,634	NA	-293	1,137	15,318	1,414

¹ Includes lease condensate.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Ending stocks for 1973-1980 are totals as of December 31.

⁴ Includes crude oil, natural gas plant production, other hydrocarbons and alcohol.

⁵ Includes stocks located in the Strategic Petroleum Reserve.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 5.1.

** Italics denote preliminary data. See Explanatory Note 2.7.

Note: Annual stock changes for 1975 and 1981 were calculated using expanded survey coverage.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil¹ and Petroleum Products Overview (continued)

		Imports ²			Exports ³			Net ⁵ Imports
		Total	Crude Oil ⁴	Petroleum Products	Total	Crude Oil	Petroleum Products	
Thousand Barrels per Day								
1973	AVERAGE	6,256	3,244	3,012	231	2	229	6,025
1974	AVERAGE	6,112	3,477	2,635	221	3	218	5,892
1975	AVERAGE	6,056	4,105	1,951	209	6	204	5,846
1976	AVERAGE	7,313	5,287	2,026	223	8	215	7,090
1977	AVERAGE	8,807	6,615	2,193	243	50	193	8,565
1978	AVERAGE	8,363	6,356	2,008	362	158	204	8,002
1979	AVERAGE	8,456	6,519	1,937	472	235	237	7,984
1980	AVERAGE	6,909	5,263	1,646	544	287	258	6,365
1981	January	6,827	4,932	1,895	558	339	219	6,270
	February	6,772	4,873	1,899	569	198	371	6,203
	March	6,028	4,521	1,507	586	210	376	5,442
	April	5,668	4,338	1,330	570	198	372	5,098
	May	5,775	4,287	1,489	595	312	283	5,180
	June	5,435	4,061	1,375	420	123	297	5,015
	July	5,816	4,296	1,521	571	257	314	5,245
	August	5,767	4,179	1,588	644	204	440	5,123
	September	6,365	4,740	1,624	519	194	325	5,845
	October	5,959	4,380	1,579	738	226	512	5,221
	November	5,741	4,046	1,695	701	278	423	5,041
	December	5,843	4,137	1,706	656	189	467	5,187
		AVERAGE	5,996	4,396	1,599	595	228	367	5,401
1982	January	5,232	3,648	1,585	829	238	591	4,404
	February	4,691	2,949	1,742	804	304	499	3,887
	March	4,461	2,856	1,606	882	321	561	3,579
	April	4,286	2,813	1,474	786	174	611	3,501
	May	4,784	3,314	1,471	803	262	542	3,981
	June	5,227	3,782	1,445	703	94	609	4,524
	July	5,763	4,245	1,518	741	229	512	5,022
	August	5,156	3,820	1,336	858	304	554	4,298
	September	5,359	3,603	1,757	791	184	606	4,569
	October	5,230	3,636	1,594	932	270	662	4,298
	November	5,726	3,863	1,864	786	262	524	4,940
	December*	R 4,562	R 2,956	R 1,606	860	193	667	3,702
		AVERAGE	5,041	3,461	1,581	815	236	579	4,226
1983	January**	4,304	3,019	1,285	NA	NA	NA	NA

¹ Includes lease condensate.

² Includes shipments from United States possessions and territories.

³ Includes shipments to United States possessions and territories.

⁴ Includes crude oil for storage in the Strategic Petroleum Reserve.

⁵ Net Imports = Imports minus Exports.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

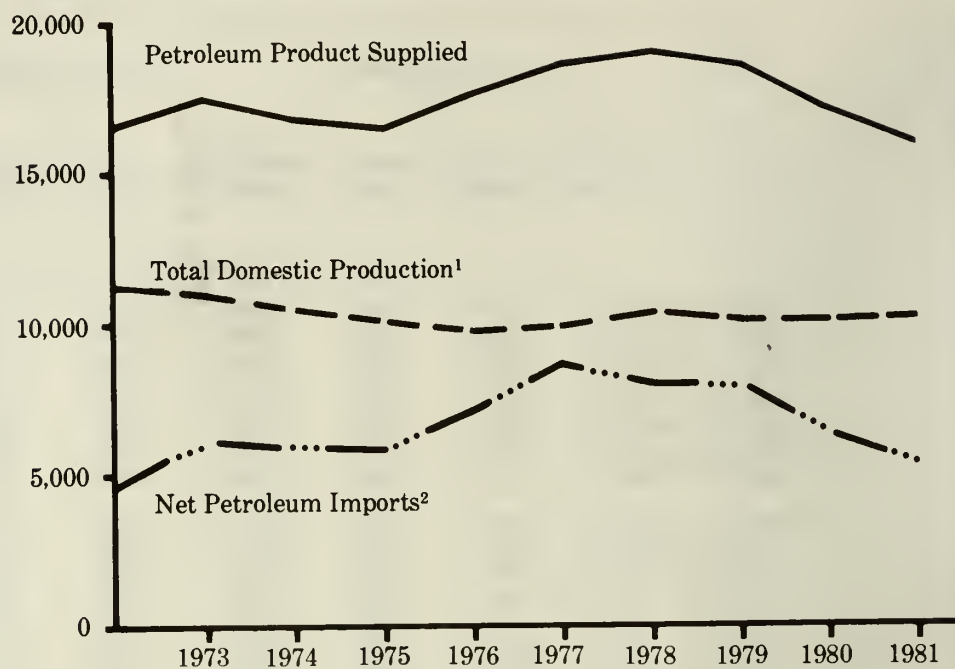
* See Explanatory Note 5.1.

** Italics denote preliminary data. See Explanatory Note 2.7.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Petroleum Overview, Annual (Thousand Barrels per Day)



¹Includes crude oil and natural gas plant production.

²Includes SPR imports.

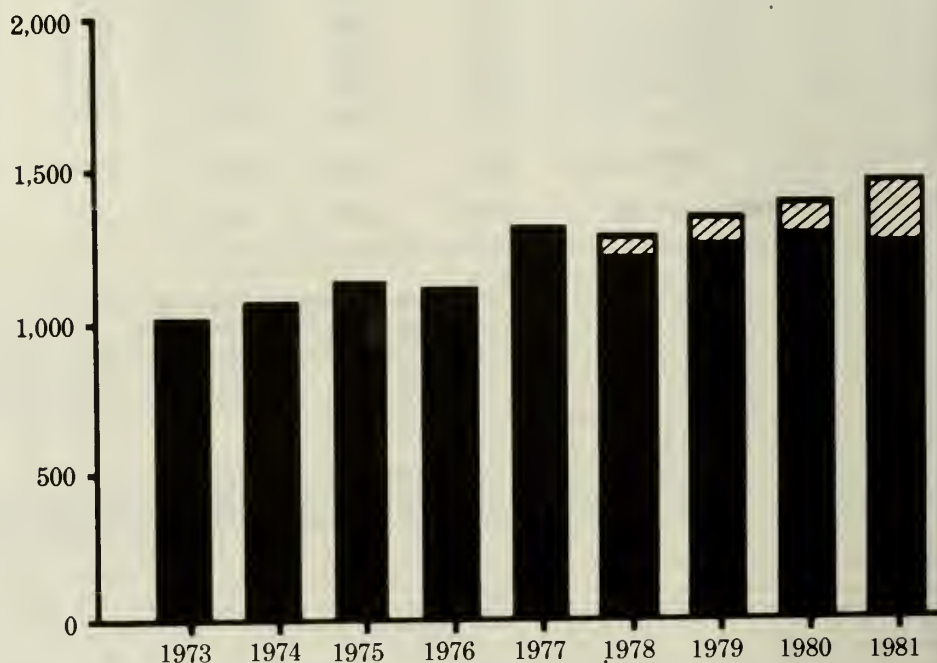
Source table: "Crude Oil and Petroleum Products Overview."

Crude Oil and Petroleum Products Ending Stocks, Annual (Millions of Barrels)

Legend

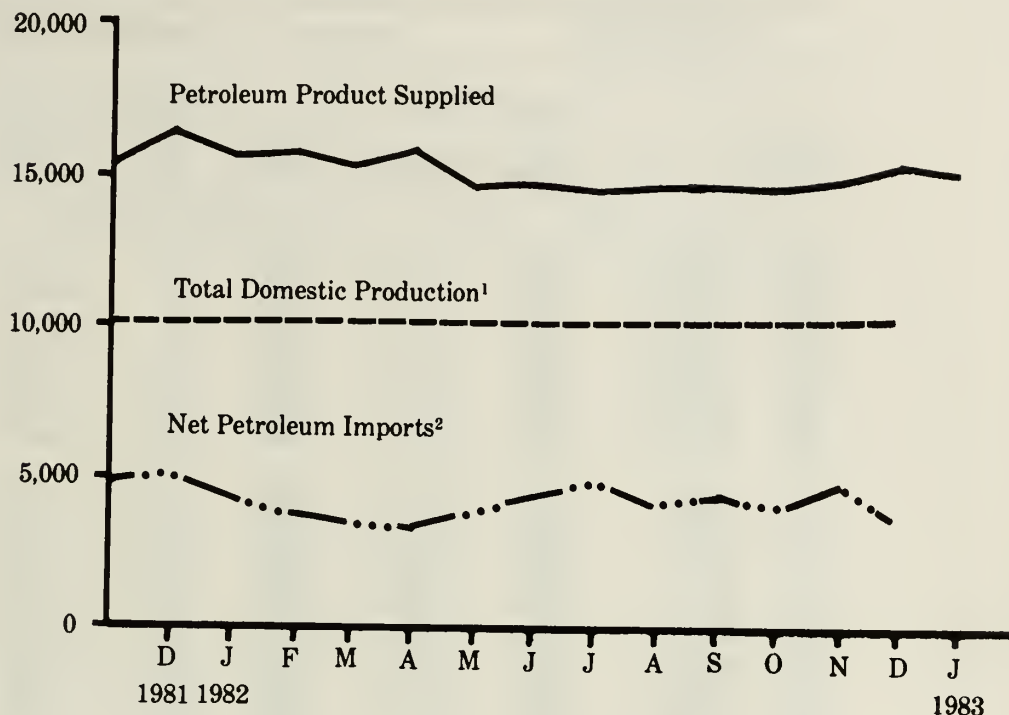
▨ SPR Crude Oil

■ Crude Oil and Petroleum Products, Excluding SPR



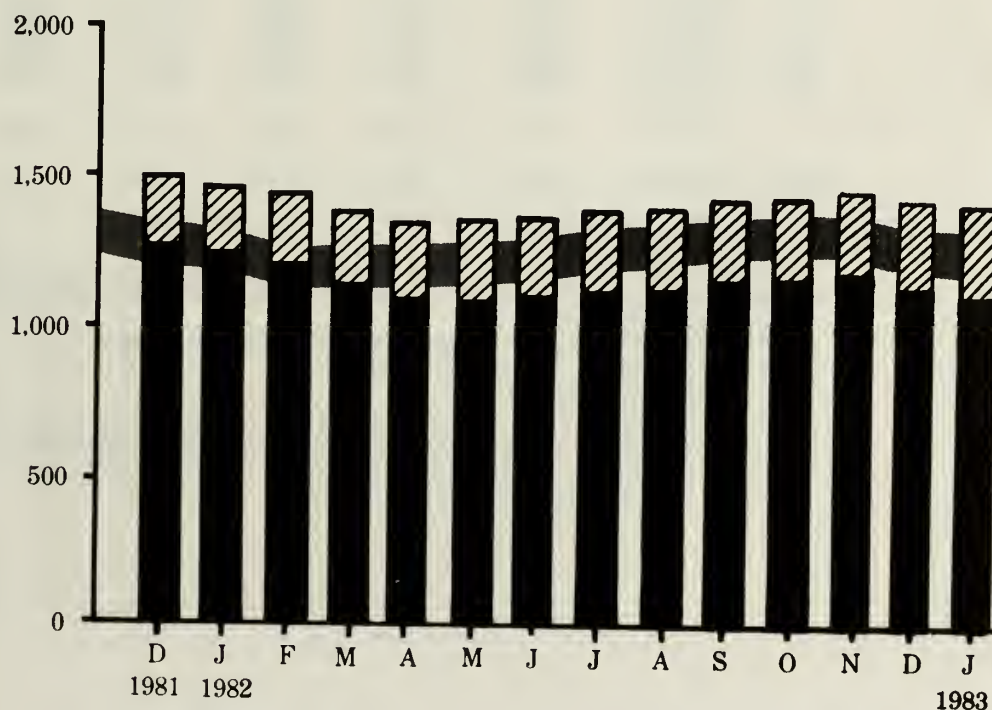
Source tables: "Crude Oil and Petroleum Products Overview" and "Crude Oil Supply and Disposition."

Petroleum Overview, Monthly (Thousand Barrels per Day)



includes crude oil and natural gas plant production.
includes SPR imports.
Source table: "Crude Oil and Petroleum Products Overview."

Crude Oil and Petroleum Product Ending Stocks, Monthly (Millions of Barrels)



Legend
SPR Crude Oil
Crude Oil and Petroleum Products, Excluding SPR
Average Stock Range¹

Average stock range (excluding SPR) based on 3 years of data. See explanatory Note 2.5.

Source tables: "Crude Oil and Petroleum Products Overview" and "Crude Oil Supply and Disposition."

Crude Oil¹ Supply and Disposition

		Supply						
		Field Production		Imports ²			Stock Withdrawal ³	
		Total Domestic	Alaskan	Total	SPR ⁴	Other	SPR ⁴	Other
		Thousand Barrels per Day						
1973	AVERAGE	9,208	198	3,244		3,244		11
1974	AVERAGE	8,774	193	3,477		3,477		-62
1975	AVERAGE	8,375	191	4,105		4,105		-17
1976	AVERAGE	8,132	173	5,287		5,287		-39
1977	AVERAGE	8,245	464	6,615	21	6,594	-20	-150
1978	AVERAGE	8,707	1,229	6,356	162	6,195	-163	84
1979	AVERAGE	8,552	1,401	6,519	67	6,452	-67	-81
1980	AVERAGE	8,597	1,617	5,263	44	5,219	-45	-52
1981	January	8,540	1,606	4,932	106	4,826	-151	201
	February	8,604	1,619	4,873	80	4,793	-127	-150
	March	8,613	1,618	4,521	140	4,382	-155	-477
	April	8,557	1,608	4,338	272	4,066	-444	-151
	May	8,501	1,580	4,287	386	3,901	-513	122
	June	8,629	1,632	4,061	318	3,743	-434	299
	July	8,500	1,605	4,296	175	4,121	-324	-36
	August	8,583	1,602	4,179	257	3,922	-372	769
	September	8,604	1,607	4,740	435	4,305	-486	201
	October	8,563	1,596	4,380	453	3,927	-501	-259
	November	8,586	1,614	4,046	271	3,774	-259	-66
	December	8,585	1,623	4,137	165	3,971	-252	82
	AVERAGE	8,572	1,609	4,396	256	4,141	-336	46
1982	January	8,669	1,712	3,648	170	3,478	-159	-77
	February	8,690	1,715	2,949	159	2,790	-213	-3
	March	8,597	1,702	2,856	185	2,671	-235	170
	April	8,652	1,687	2,813	190	2,623	-233	341
	May	8,660	1,725	3,314	204	3,110	-176	225
	June	8,681	1,675	3,782	105	3,678	-105	191
	July	8,649	1,715	4,245	97	4,147	-97	-58
	August	8,701	1,699	3,820	208	3,611	-208	-233
	September	8,733	1,707	3,603	139	3,463	-143	395
	October	8,676	1,677	3,636	216	3,420	-216	-348
	November	8,690	1,667	3,863	180	3,683	-179	-177
	December*	8,660	1,663	R 2,956	R 124	R 2,832	R -125	R 267
	AVERAGE	8,671	1,695	3,461	165	3,296	-174	57
1983	January**	8,634	1,698	3,019	189	2,830	-206	-87

¹ Includes lease condensate.

² Includes shipments from United States possessions and territories.

³ A negative number indicates an increase in stocks and a positive number indicates a decrease.

⁴ Strategic Petroleum Reserve.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 5.2.

** Italics denote preliminary data. See Explanatory Note 2.7.

Note: Annual stock changes for 1975 and 1981 were calculated using expanded survey coverage.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil¹ Supply and Disposition (continued)

		Supply (Continued)		Disposition		Ending Stocks ²		
		Unac- counted for Crude Oil	Crude Used Directly and Losses	Refinery Inputs	Exports ³	Total Crude Oil	SPR ⁴	Other Primary
		Thousand Barrels per Day				Millions of Barrels		
1973	AVERAGE	3	-32	12,431	2	242		242
1974	AVERAGE	-25	-28	12,133	3	265		265
1975	AVERAGE	17	-30	12,442	6	271		271
1976	AVERAGE	77	-33	13,416	8	285		285
1977	AVERAGE	-6	-30	14,602	50	348	7	340
1978	AVERAGE	-57	-30	14,739	158	376	67	309
1979	AVERAGE	-11	-29	14,648	235	430	91	339
1980	AVERAGE	34	-28	13,481	287	466	108	358
1981	January	113	-49	13,247	339	486	112	374
	February	-41	-58	12,902	198	494	116	378
	March	154	-63	12,383	210	514	121	393
	April	51	-62	12,091	198	532	134	397
	May	286	-62	12,309	312	544	150	394
	June	49	-65	12,415	123	548	163	385
	July	147	-65	12,261	257	559	173	386
	August	16	-63	12,908	204	547	185	362
	September	-295	-65	12,505	194	555	199	356
	October	166	-66	12,057	226	579	215	364
	November	279	-68	12,240	278	589	223	366
	December	52	-67	12,349	189	594	230	363
	AVERAGE	83	-63	12,470	228			
1982	January	-138	-66	11,638	238	606	235	371
	February	199	-66	11,252	304	612	241	371
	March	278	-68	11,277	321	614	249	366
	April	56	-68	11,386	174	611	256	355
	May	105	-65	11,801	262	609	261	348
	June	110	-67	12,498	94	607	264	343
	July	1	-63	12,447	229	612	267	345
	August	140	-59	11,858	304	625	274	352
	September	-218	-59	12,126	184	618	278	340
	October	324	-53	11,750	270	635	285	351
	November	-141	-52	11,741	262	646	290	356
	December*	2	-54	R 11,514	193	R 642	R 294	R 348
	AVERAGE	60	-62	11,776	236			
1983	January**	NA	NA	11,287	NA	656	300	356

¹ Includes lease condensate.

² Ending stocks for 1973-1980 are totals as of December 31.

³ Includes shipments to United States possessions and territories.

⁴ Strategic Petroleum Reserve.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

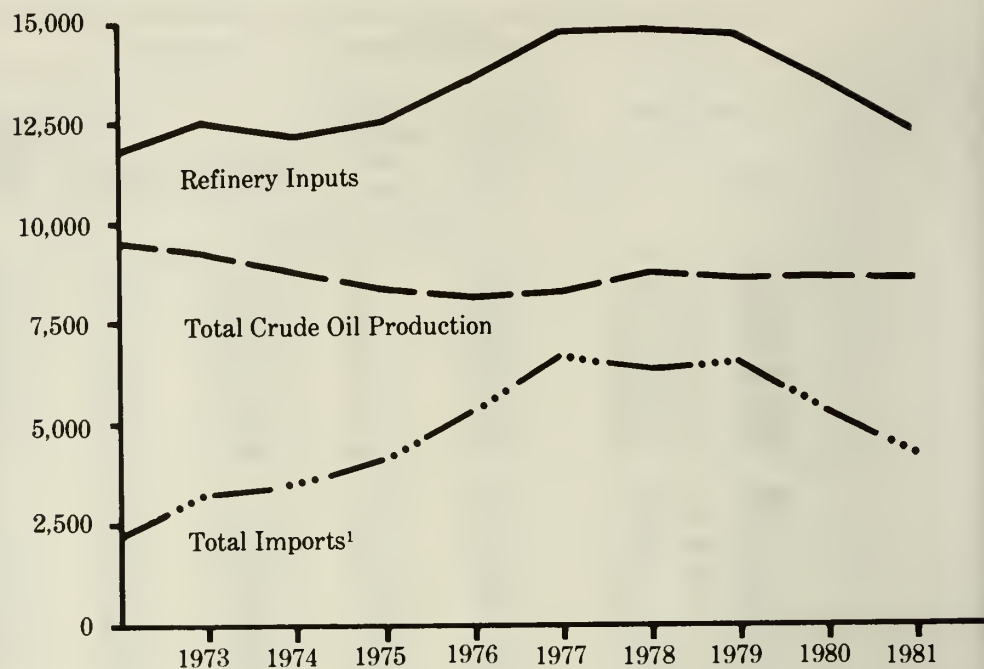
* See Explanatory Note 5.2.

** Italics denote preliminary data. See Explanatory Note 2.7.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil Supply and Disposition, Annual (Thousand Barrels per Day)



¹Includes SPR imports.

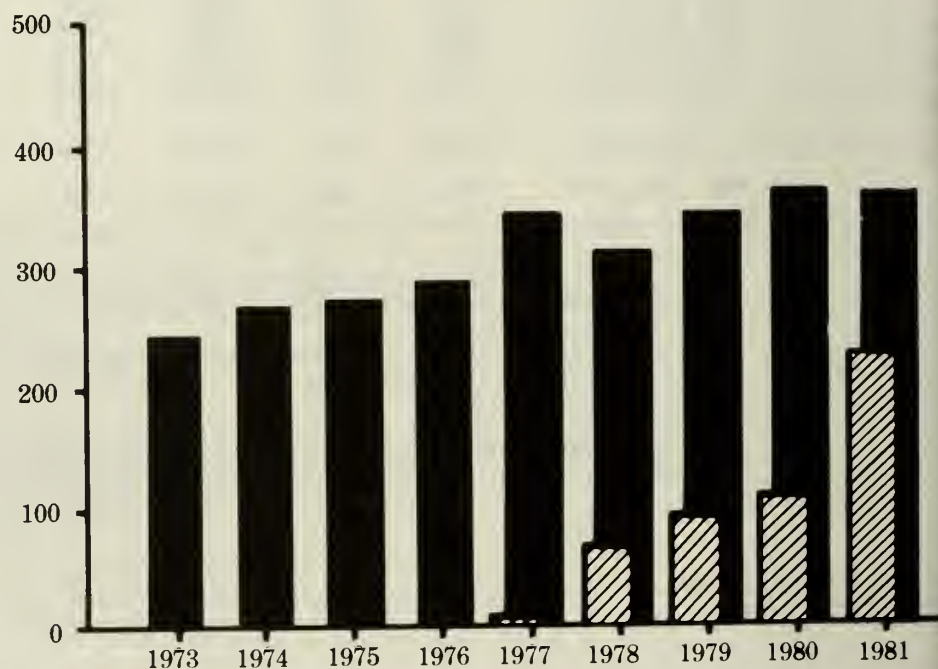
Source table: "Crude Oil Supply and Disposition."

Crude Oil Ending Stocks, Annual (Millions of Barrels)

Legend

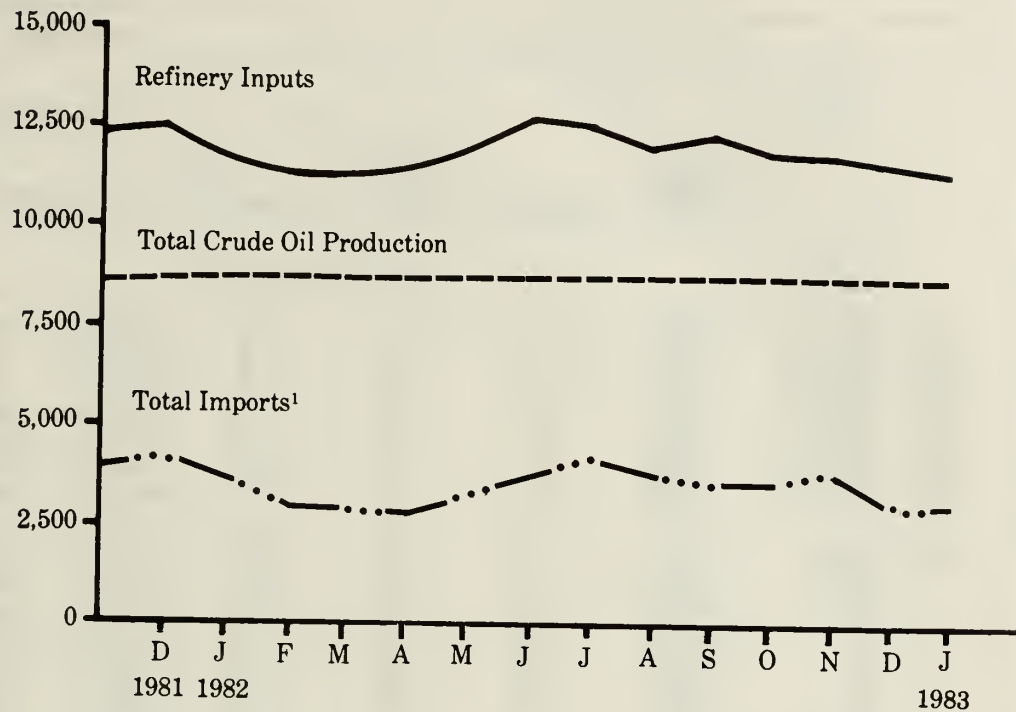
▨ SPR

■ Other Primary



Source table: "Crude Oil Supply and Disposition."

Crude Oil Supply and Disposition, Monthly (Thousand Barrels per Day)

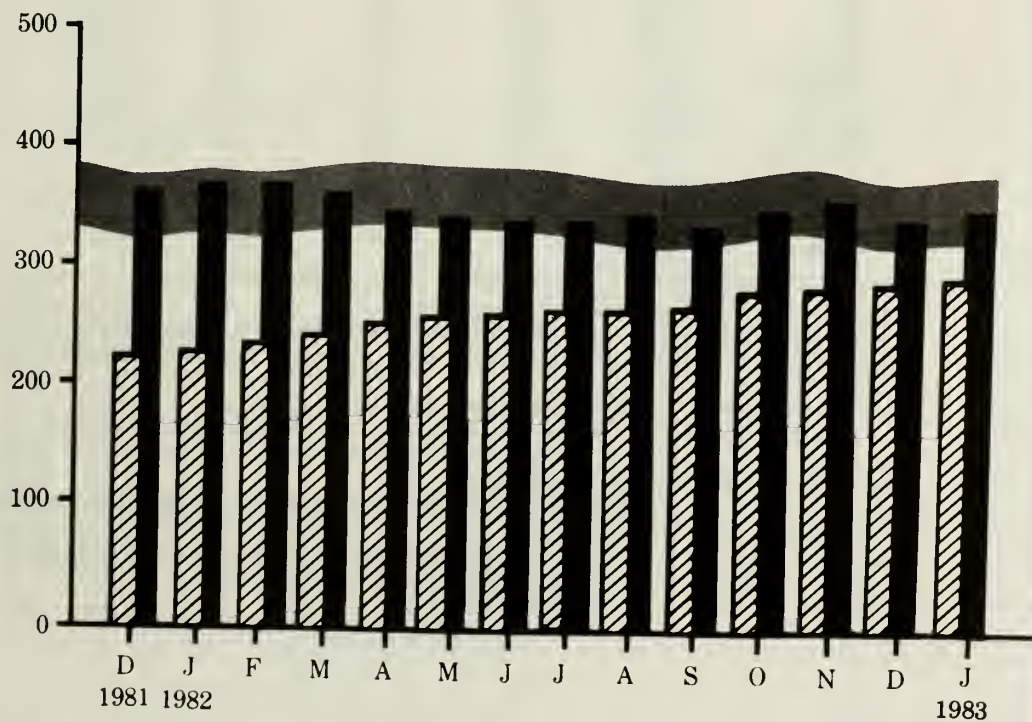


Includes SPR imports.

Source table: "Crude Oil Supply and Disposition."

Crude Oil Ending Stocks, Monthly (Millions of Barrels)

Legend
 ▨ SPR
 ■ Other Primary
 ■ Average Stock Range¹



average stock range (excluding SPR) based on 3 years of data. See explanatory Note 2.5.

Source table: "Crude Oil Supply and Disposition."

Finished Motor Gasoline Supply and Disposition

		Supply			Disposition				Ending Stocks	
		Total Produc- tion	Imports ¹	Stock With- drawal ^{1 2}	Exports	Product Supplied			Total Motor Gasoline ³	Finished Motor Gasoline
						Total	Unleaded ⁴	Unleaded		
Thousand Barrels per Day								Percent of Total	Millions of Barrels	
1973	AVERAGE	6,535	134	9	4	6,674	NA	NA	209	
1974	AVERAGE	6,360	204	-24	2	6,537	NA	NA	218	
1975	AVERAGE	6,520	184	-28	2	6,675	NA	NA	235	
1976	AVERAGE	6,841	131	10	3	6,978	NA	NA	231	
1977	AVERAGE	7,033	217	-72	2	7,177	1,976	27.5	258	
1978	AVERAGE	7,169	190	54	1	7,412	2,521	34.0	238	
1979	AVERAGE	6,852	181	2	(s)	7,034	2,798	39.8	237	
1980	AVERAGE	6,506	140	-66	1	6,579	3,067	46.6	261	
1981	January	6,715	138	-421	(s)	6,431	3,141	48.8	276	227
	February	6,308	111	-118	1	6,301	3,095	49.1	284	230
	March	6,213	171	-81	(s)	6,303	3,097	49.1	285	232
	April	6,114	186	303	(s)	6,602	3,284	49.7	272	223
	May	6,122	150	344	1	6,615	3,115	47.1	259	213
	June	6,220	186	622	1	7,028	3,419	48.6	242	194
	July	6,405	151	268	(s)	6,823	3,424	50.2	228	186
	August	6,611	124	-95	3	6,637	3,344	50.4	233	189
	September	6,564	169	-70	2	6,662	3,338	50.1	237	191
	October	6,426	147	7	3	6,578	3,257	49.5	236	190
	November	6,564	148	-338	1	6,373	3,198	50.2	248	201
	December	6,586	197	-91	11	6,681	3,444	51.5	253	203
		AVERAGE	6,405	157	28	2	6,588	3,264	49.5	
1982	January	6,181	114	-358	18	5,920	3,033	51.2	262	214
	February	5,917	133	28	8	6,070	3,145	51.8	262	213
	March	6,004	183	469	44	6,612	3,396	51.4	248	199
	April	6,104	177	641	33	6,890	3,494	50.7	223	180
	May	6,322	163	188	23	6,650	3,415	51.3	215	174
	June	6,767	195	-136	14	6,812	3,561	52.3	220	178
	July	6,788	200	-165	24	6,799	3,574	52.6	226	183
	August	6,447	284	-60	16	6,655	3,520	52.9	226	185
	September	6,530	215	-217	22	6,507	3,385	52.0	234	191
	October	6,253	177	-25	15	6,391	3,360	52.6	234	192
	November	6,273	206	91	11	6,559	3,448	52.6	230	189
	December*	R 6,540	R 178	-164	7	R 6,548	3,486	53.2	R 235	R 194
		AVERAGE	6,347	186	24	20	6,537	3,403	52.1	
1983	January**	6,050	156	NA	NA	5,963	NA	NA	243	201

¹ Beginning in 1981 excludes blending components.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Includes motor gasoline blending components. Ending stocks for 1973-1980 are totals as of December 31.

⁴ Includes gasohol.

Totals may not equal sum of components due to independent rounding.

(s) = Less than 500 barrels. NA = Not available. R = Revised data.

* See Explanatory Note 5.3.

** Italics denote preliminary data. See Explanatory Note 2.7.

Notes: Beginning in January 1981, survey forms were modified. See Explanatory Note 4 on Changes for the effects on motor gasoline statistics.

Annual stock changes for 1975 and 1981 were calculated using expanded survey coverage.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Distillate Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Crude Used Directly	Exports	Product Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	2,822	392	-115	2	9	3,092	196
1974	AVERAGE	2,669	289	-9	2	2	2,948	200
1975	AVERAGE	2,654	155	40	2	1	2,851	209
1976	AVERAGE	2,924	146	62	1	1	3,133	186
1977	AVERAGE	3,278	250	-176	1	1	3,352	250
1978	AVERAGE	3,167	173	93	1	3	3,432	216
1979	AVERAGE	3,153	193	-34	1	3	3,311	229
1980	AVERAGE	2,662	142	64	1	3	2,866	205
1981	January	2,989	273	836	11	(^s)	4,109	179
	February	2,809	325	246	11	17	3,373	173
	March	2,484	147	264	9	(^s)	2,904	164
	April	2,418	116	-9	10	3	2,532	165
	May	2,454	179	-232	10	(^s)	2,411	172
	June	2,501	225	-270	9	(^s)	2,464	180
	July	2,395	179	-204	10	2	2,378	186
	August	2,656	174	-450	8	(^s)	2,388	200
	September	2,610	129	-235	10	1	2,513	207
	October	2,485	119	197	9	5	2,803	201
	November	2,716	124	36	11	6	2,880	200
	December	2,856	95	277	11	26	3,212	192
	AVERAGE	2,613	173	38	10	5	2,829	
1982	January	2,615	96	780	10	90	3,410	166
	February	2,447	130	689	11	90	3,187	147
	March	2,294	48	612	10	84	2,881	128
	April	2,357	59	631	13	64	2,996	109
	May	2,618	74	-184	10	75	2,444	114
	June	2,731	100	-335	10	55	2,450	125
	July	2,734	124	-761	11	24	2,084	148
	August	2,526	79	-346	10	40	2,228	159
	September	2,658	59	-77	12	139	2,514	161
	October	2,837	97	-290	8	66	2,586	170
	November	2,863	141	-514	8	24	2,475	186
	December*	R 2,655	R 109	R 226	10	143	R 2,856	R 179
	AVERAGE	2,612	93	32	10	74	2,672	
1983	January**	2,375	63	669	NA	NA	3,056	160

¹ Ending stocks for 1973 - 1980 are totals as of December 31.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

Totals may not equal sum of components due to independent rounding.

(^s) = Less than 500 barrels per day. NA = Not available. R = Revised data.

* See Explanatory Note 5.4.

** Italics denote preliminary data. See Explanatory Note 2.7.

Note: Beginning in January 1981, survey forms were modified. See Explanatory Note 4 on Changes for the effects on Distillate Fuel Oil statistics.

Annual stock changes for 1975 and 1981 were calculated using expanded survey coverage.

Geographic coverage: The 50 United States and the District of Columbia.

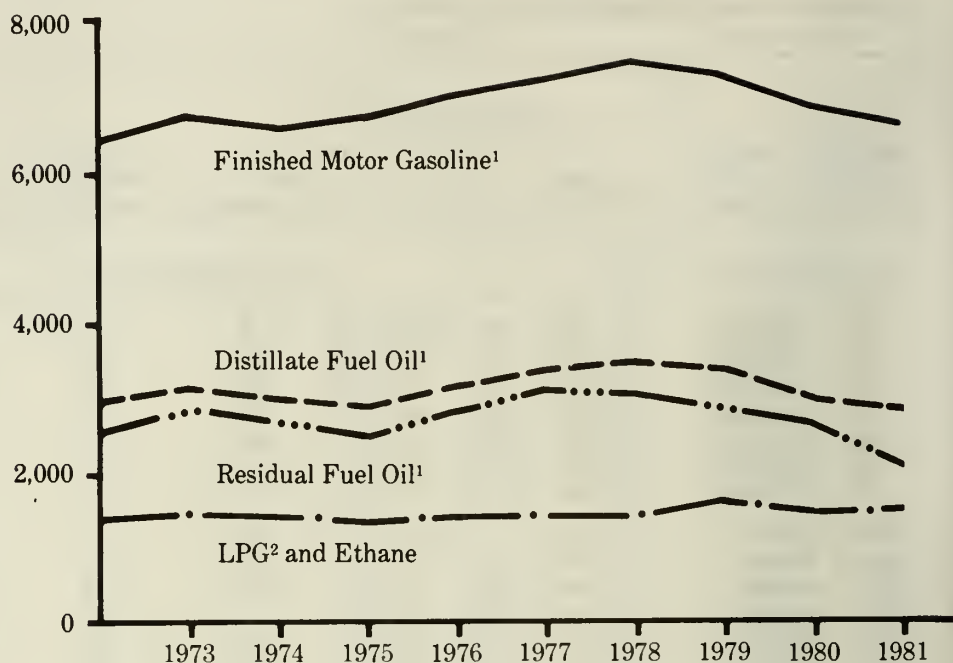
Sources: See "Sources" at the end of this section.

¹Figures for 1979 and 1980 recast to account for data system changes in 1981. See Explanatory Note 4.

²Liquefied Petroleum Gases.

Source tables: "Finished Motor Gasoline Supply and Disposition," "Distillate Fuel Oil Supply and Disposition," "Residual Fuel Oil Supply and Disposition," "Liquefied Petroleum Gases and Ethane Supply and Disposition."

Products Supplied, Annual (Thousand Barrels per Day)



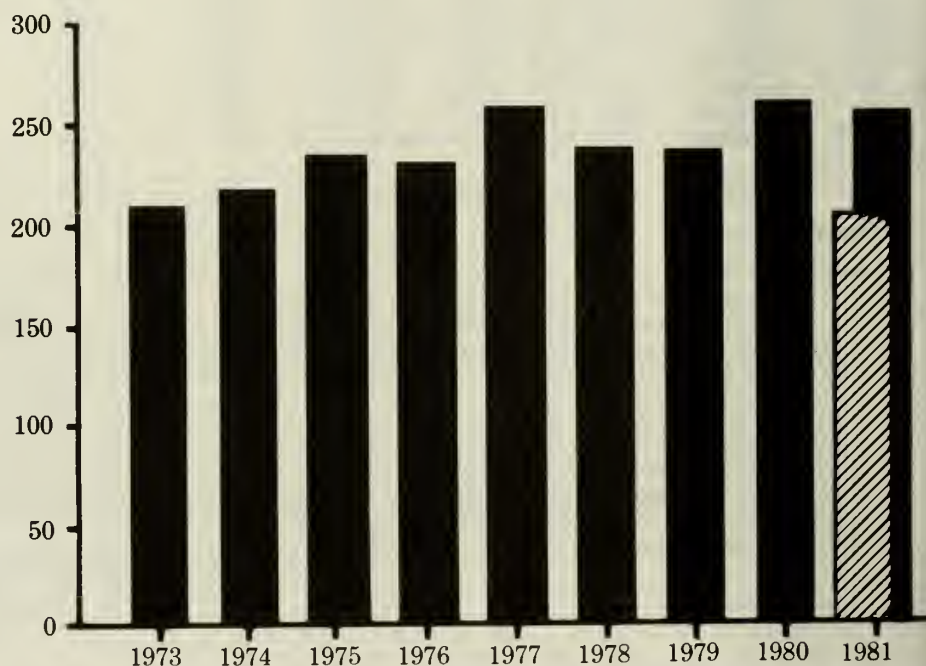
Motor Gasoline¹ Ending Stocks, Annual (Millions of Barrels)

Legend

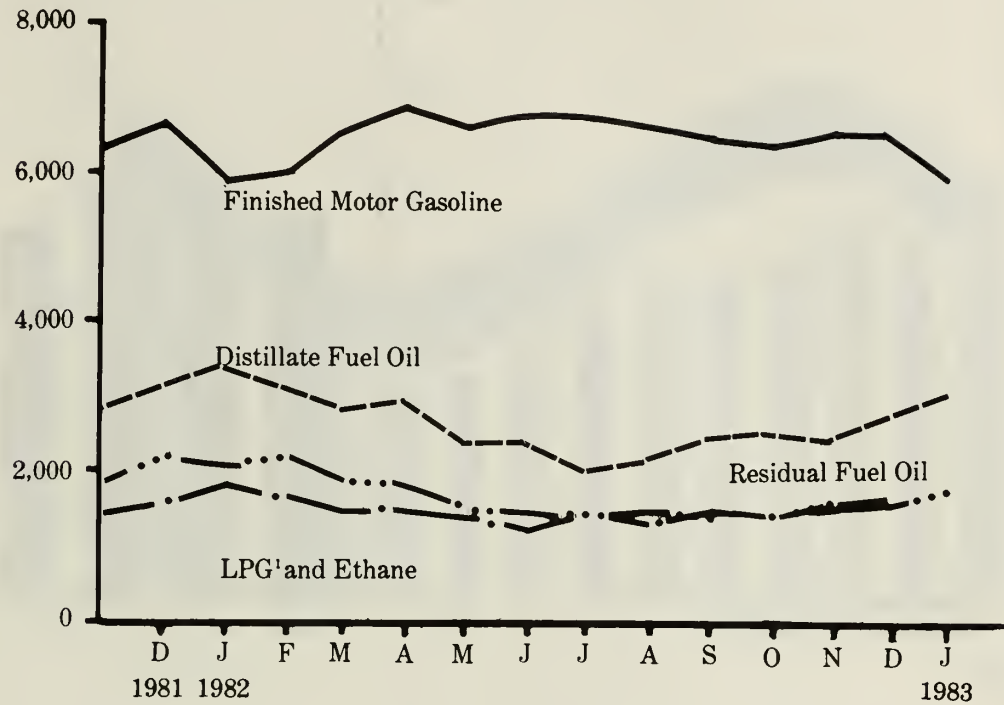
- Total
- ▨ Finished

¹Includes finished motor gasoline blending components.

Source table: "Finished Motor Gasoline Supply and Disposition."



Products Supplied, Monthly (Thousand Barrels per Day)



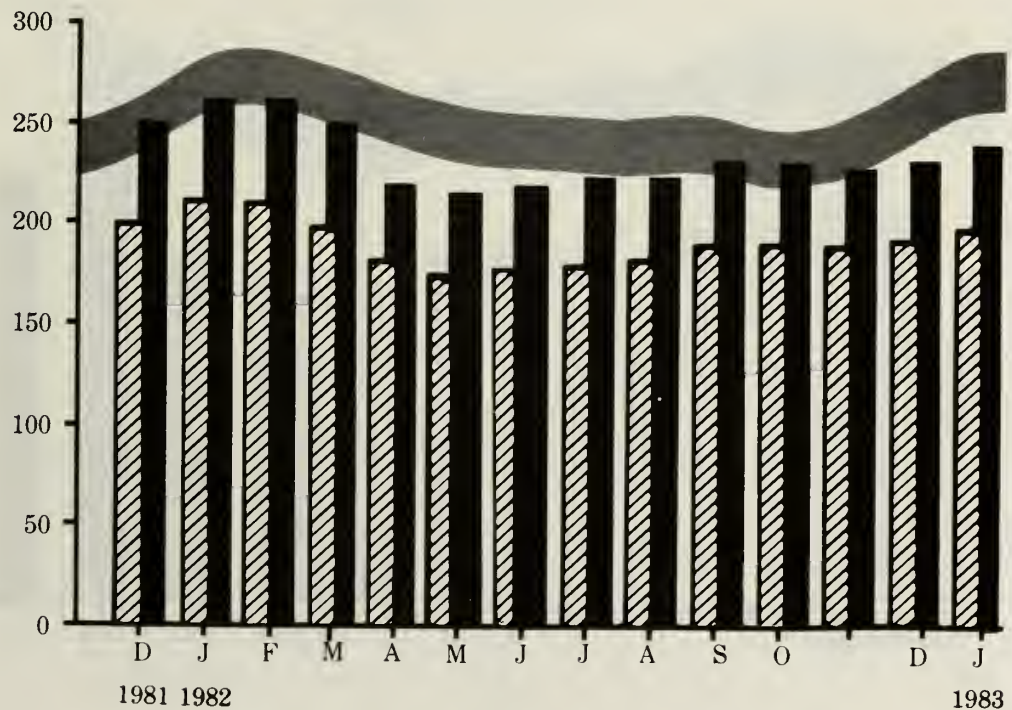
Liquefied Petroleum Gases.

Source tables: "Finished Motor Gasoline Supply and Disposition," "Distillate Fuel Oil Supply and Disposition," "Residual Fuel Oil Supply and Disposition," "Liquefied Petroleum Gases and Ethane Supply and Disposition."

Motor Gasoline Ending Stocks, Monthly (Millions of Barrels)

Legend

- Total Motor Gasoline¹
- ▨ Finished Motor Gasoline
- Average Stock Range²



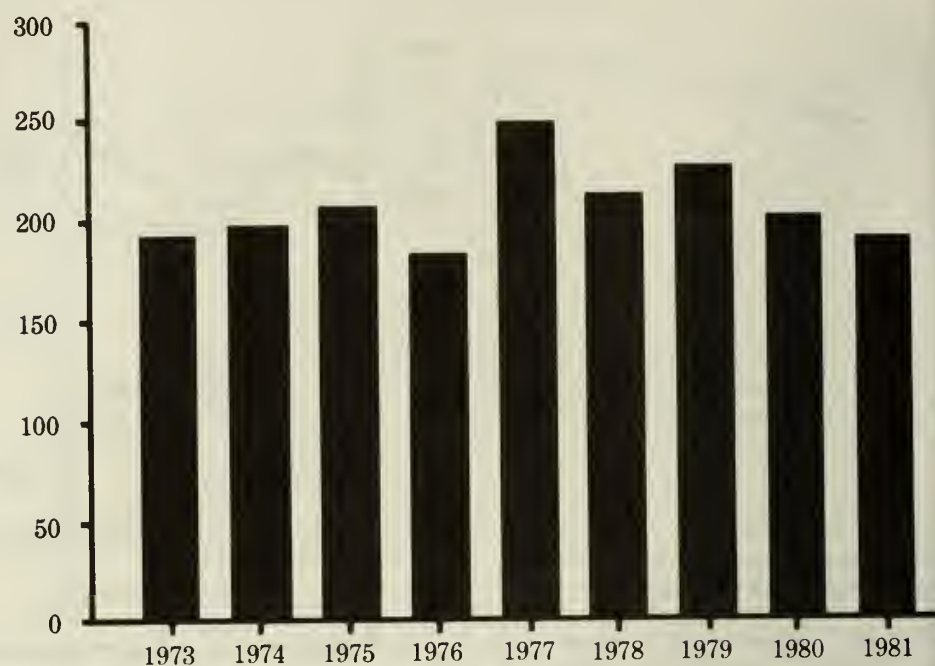
includes finished motor gasoline blending components.

average stock range for total motor gasoline based on 3 years of data. See explanatory Note 2.5.

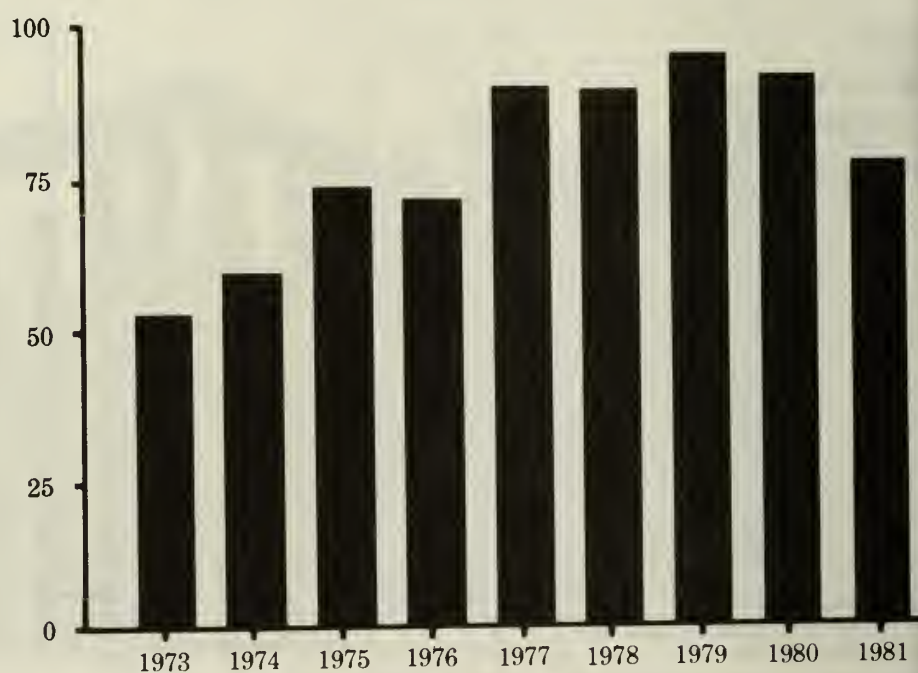
Source table: "Finished Motor Gasoline Supply and Disposition."

Source table: "Distillate Fuel Oil Supply and Disposition."

Distillate Fuel Oil Ending Stocks, Annual (Millions of Barrels)



Residual Fuel Oil Ending Stocks, Annual (Millions of Barrels)



Source table: "Residual Fuel Oil Supply and Disposition."

Distillate Fuel Oil Ending Stocks, Monthly (Millions of Barrels)

Legend

■ Average Stock Range¹

¹Average stock range based on 3 years of data. See Explanatory Note 2.5.

Source table: "Distillate Fuel Oil Supply and Disposition."



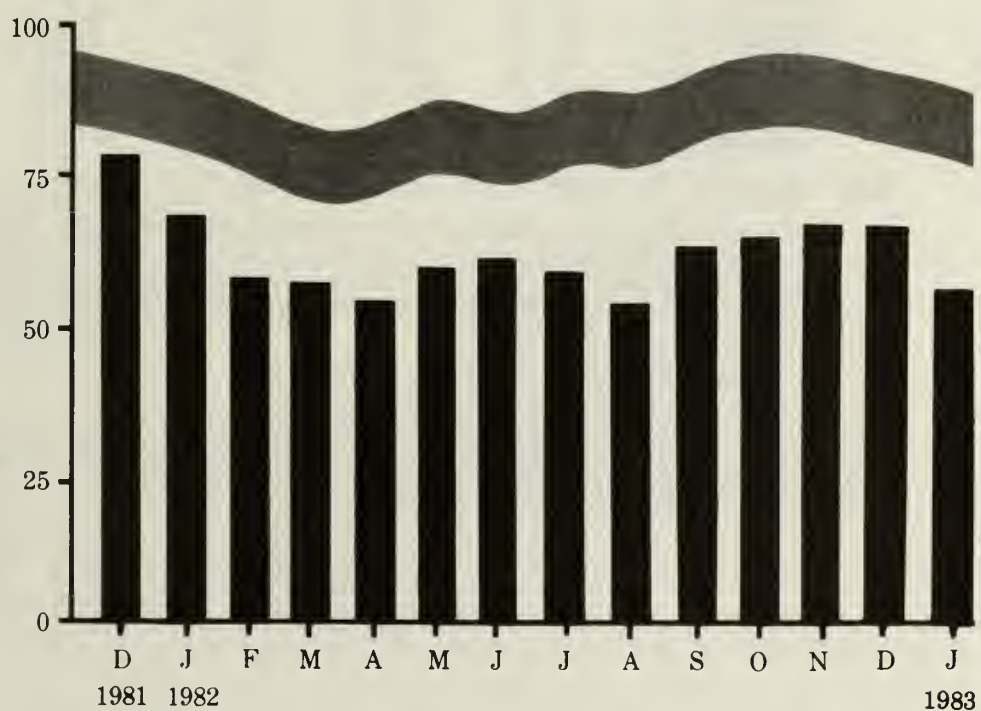
Residual Fuel Oil Ending Stocks, Monthly (Millions of Barrels)

Legend

■ Average Stock Range¹

¹Average stock range based on 3 years of data. See Explanatory Note 2.5.

Source table: "Residual Fuel Oil Supply and Disposition."



Residual Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Crude Used Directly	Exports	Products Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	971	1,853	5	17	23	2,822	53
1974	AVERAGE	1,070	1,587	-17	13	14	2,639	60
1975	AVERAGE	1,235	1,223	2	15	15	2,462	74
1976	AVERAGE	1,377	1,413	5	17	12	2,801	72
1977	AVERAGE	1,754	1,359	-48	13	6	3,071	90
1978	AVERAGE	1,667	1,355	-1	13	13	3,023	90
1979	AVERAGE	1,687	1,151	-15	12	9	2,826	96
1980	AVERAGE	1,580	939	10	12	33	2,508	92
1981	January	1,612	1,015	302	32	65	2,896	82
	February	1,565	954	150	44	125	2,588	78
	March	1,424	699	100	48	145	2,126	75
	April	1,320	584	66	49	151	1,868	73
	May	1,223	741	-170	49	25	1,817	78
	June	1,232	540	291	49	76	2,037	69
	July	1,174	830	2	48	82	1,971	69
	August	1,231	819	-179	50	69	1,852	75
	September	1,292	841	-176	51	126	1,882	80
	October	1,238	786	8	54	202	1,884	80
	November	1,227	880	-49	53	203	1,909	81
	December	1,329	916	110	52	157	2,250	78
	AVERAGE	1,321	800	37	48	118	2,088	
1982	January	1,183	821	328	53	235	2,150	68
	February	1,136	928	358	53	213	2,261	58
	March	1,121	910	26	53	197	1,912	57
	April	1,162	762	124	52	234	1,867	54
	May	1,127	738	-175	52	191	1,551	59
	June	1,077	643	-49	50	217	1,504	61
	July	1,029	576	51	49	239	1,466	59
	August	1,007	519	200	47	235	1,538	53
	September	1,007	871	-302	44	148	1,472	62
	October	954	758	-56	43	234	1,466	64
	November	989	843	-95	43	182	1,597	66
	December*	R 990	R 747	R 8	43	186	R 1,602	R 66
	AVERAGE	1,065	758	33	48	209	1,695	
1983	January**	1,029	627	385	NA	NA	1,825	56

¹ Ending Stocks for 1973-1980 are totals as of December 31.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 5.4.

** Italics denote preliminary data. See Explanatory Note 2.7.

Notes: Beginning in January 1981, survey forms were modified.

See Explanatory Note 4 on changes for the effects on residual fuel oil statistics.

Annual stock changes for 1975 and 1981 were calculated using expanded survey coverage.

Geographic Coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Liquefied Petroleum Gases and Ethane Supply and Disposition

		Supply			Disposition			Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Refinery Inputs	Exports	Product Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	1,600	132	-35	220	27	1,449	99
1974	AVERAGE	1,565	123	-38	220	25	1,406	113
1975	AVERAGE	1,527	112	-35	246	26	1,333	125
1976	AVERAGE	1,535	130	24	260	25	1,404	116
1977	AVERAGE	1,566	161	-55	233	18	1,422	136
1978	AVERAGE	1,537	123	12	239	20	1,413	132
1979	AVERAGE	1,556	217	70	236	15	1,592	111
1980	AVERAGE	1,535	216	-27	233	21	1,469	120
1981	January	1,617	306	363	352	21	1,913	117
	February	1,593	327	173	303	21	1,769	112
	March	1,551	260	-4	257	20	1,530	112
	April	1,586	214	-236	231	26	1,308	119
	May	1,587	189	-258	220	19	1,279	127
	June	1,567	206	-208	237	24	1,304	133
	July	1,507	213	-258	215	17	1,229	141
	August	1,592	195	-242	235	149	1,160	149
	September	1,622	199	-75	287	21	1,438	151
	October	1,593	287	72	320	76	1,556	149
	November	1,571	280	86	383	58	1,495	146
	December	1,468	255	379	428	50	1,624	135
	AVERAGE	1,571	244	-18	289	42	1,466	
1982	January	1,546	314	480	398	67	1,873	122
	February	1,476	291	310	327	51	1,699	114
	March	1,523	223	145	289	74	1,528	109
	April	1,566	188	107	257	77	1,527	106
	May	1,583	186	-61	235	43	1,431	108
	June	1,571	192	-109	262	106	1,286	111
	July	1,556	227	-5	253	37	1,487	111
	August	1,591	125	-44	254	61	1,357	112
	September	1,606	247	33	273	85	1,528	111
	October	1,582	194	92	306	81	1,481	109
	November	1,603	267	172	370	37	1,634	103
	December*	1,626	258	270	395	56	1,702	95
	AVERAGE	1,570	225	115	301	65	1,544	

¹ Ending stocks for 1973 - 1980 are totals as of December 31.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

Totals may not equal sum of components due to independent rounding.

* See Explanatory Note 5.5.

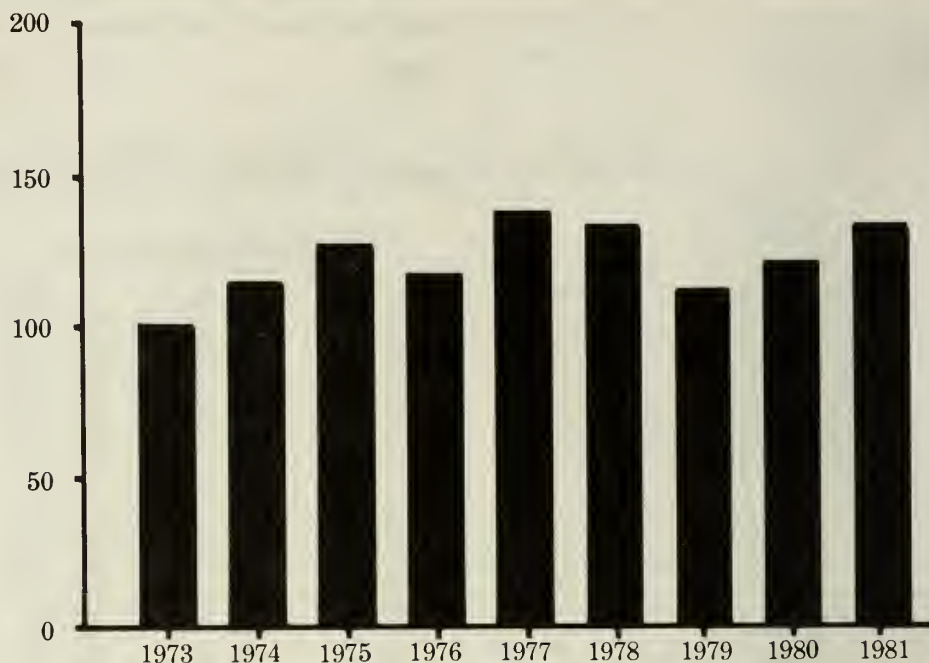
Note: Annual stock changes for 1975 and 1981 were calculated using expanded survey coverage.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Source table: "Liquefied Petroleum Gases and Ethane Supply and Disposition."

Liquefied Petroleum Gases and Ethane Ending Stocks, Annual (Millions of Barrels)



Other Petroleum Products¹ Ending Stocks, Annual (Millions of Barrels)



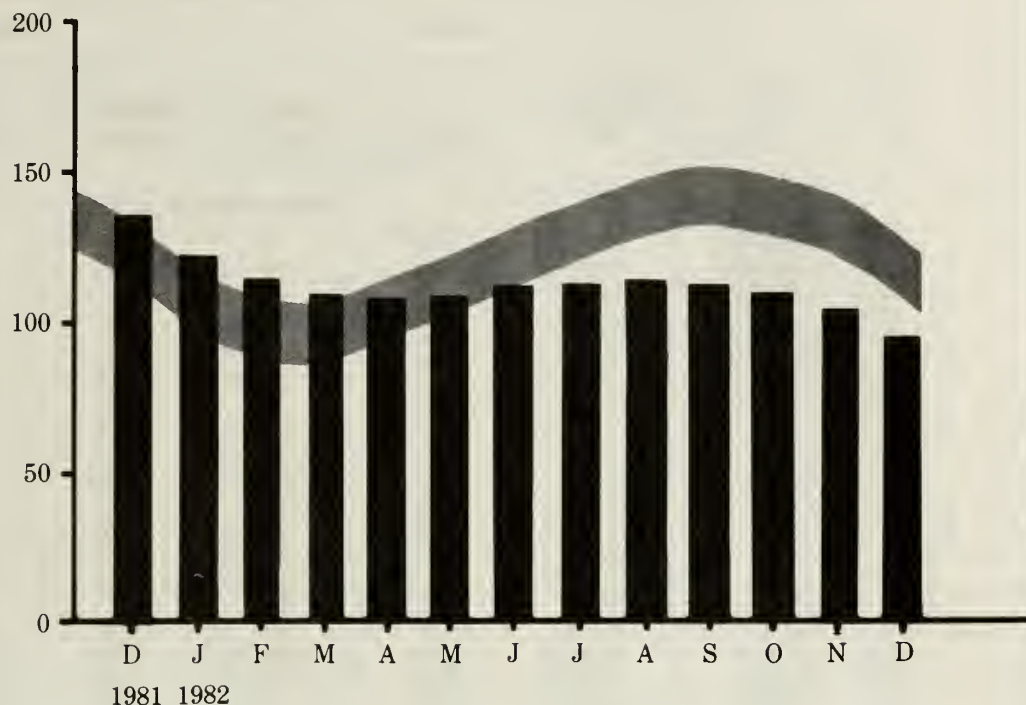
¹Includes natural gasoline and isopentane, unfinished oils, gasoline blending components, jet fuels, kerosene, lubricants, and asphalt. Some gasoline blending components not included prior to 1981.

Source table: "Other Petroleum Products Supply and Disposition."

Liquefied Petroleum Gases and Ethane Ending Stocks, Monthly (Millions of Barrels)

Legend

■ Average Stock Range¹



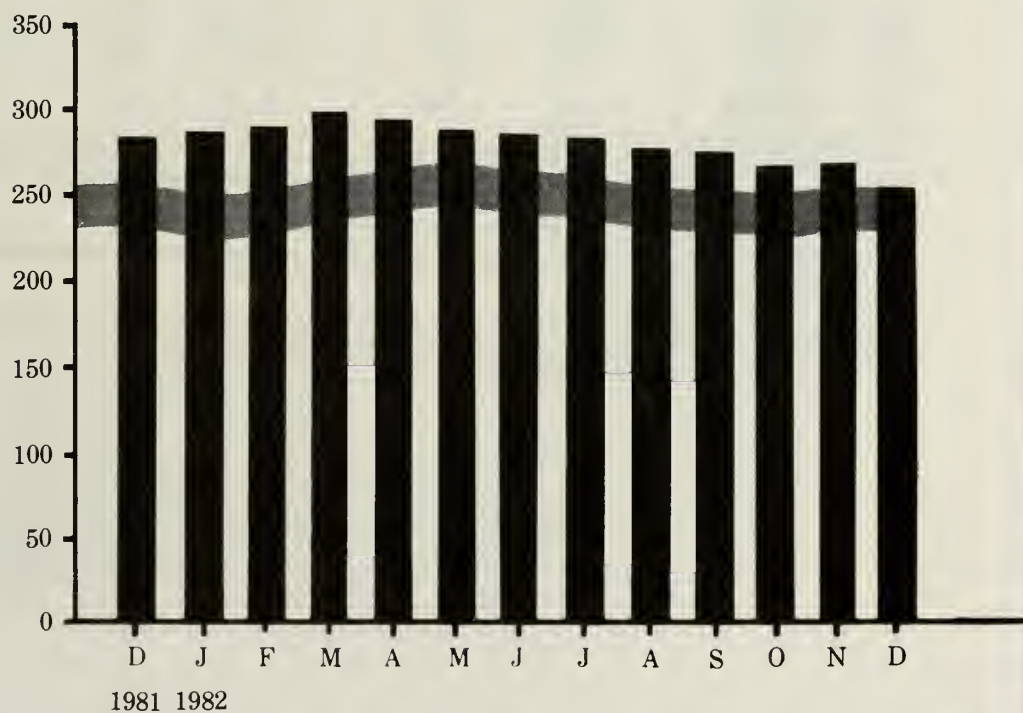
¹Average stock range based on 3 years of data. See Explanatory Note 2.5.

Source table: "Liquefied Petroleum Gases and Ethane Supply and Disposition."

Other Petroleum Products¹ Endings Stocks, Monthly (Millions of Barrels)

Legend

■ Average Stock Range²



Includes natural gasoline and isopentane, unfinished oils, gasoline blending components, jet fuels, kerosene, lubricants, and asphalt.

²Average stock range based on 3 years of data. See Explanatory Note 2.5.

Source table: "Other Petroleum Products Supply and Disposition."

Other Petroleum Products¹ Supply and Disposition

		Supply			Disposition			Ending Stocks ²
		Total Production	Imports	Stock Withdrawal ³	Refinery Inputs	Exports	Products Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	3,693	502	-9	750	166	3,270	208
1974	AVERAGE	3,558	432	-28	665	174	3,123	218
1975	AVERAGE	3,424	277	-2	537	160	3,002	219
1976	AVERAGE	3,643	206	-5	524	175	3,145	220
1977	AVERAGE	3,912	205	-27	514	165	3,410	230
1978	AVERAGE	4,046	166	14	492	167	3,568	225
1979	AVERAGE	4,153	195	-37	352	209	3,749	238
1980	AVERAGE	3,956	210	-23	311	198	3,634	247
1981	January	3,821	162	80	851	132	3,081	296
	February	3,723	182	-200	538	208	2,958	302
	March	3,722	230	-55	642	210	3,043	304
	April	3,711	230	24	733	192	3,040	303
	May	3,892	229	-58	594	238	3,231	305
	June	3,925	218	-29	656	197	3,261	306
	July	3,852	149	284	791	212	3,282	297
	August	3,876	276	-33	676	219	3,225	298
	September	3,718	285	215	883	176	3,159	291
	October	3,503	241	193	710	227	3,000	285
	November	3,579	262	33	784	154	2,935	284
	December	3,543	243	71	805	223	2,829	282
	AVERAGE	3,739	226	46	723	199	3,088	
1982	January	3,181	240	-102	602	180	2,536	284
	February	3,364	260	-116	646	138	2,724	287
	March	3,485	241	-204	734	161	2,627	294
	April	3,394	287	91	801	204	2,767	291
	May	3,296	309	198	823	210	2,769	285
	June	3,481	315	115	815	216	2,879	281
	July	3,578	391	15	862	187	2,935	281
	August	3,519	329	256	841	202	3,060	273
	September	3,442	365	74	767	213	2,901	271
	October	3,472	367	223	901	266	2,896	264
	November	3,464	406	-12	824	269	2,766	264
	December*	3,285	314	363	886	275	2,801	253
	AVERAGE	3,413	319	77	793	211	2,805	

¹ Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, and residual fuel oil.

² Ending Stocks for 1973-1980 are totals as of December 31.

³ A negative number indicates an increase in stocks and a positive number indicates a decrease. Totals may not equal sum of components due to independent rounding.

* See Explanatory Note 5.6.

Note: Annual stock changes for 1975 and 1981 were calculated using expanded survey coverage.

Geographic Coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil and Petroleum Product Imports from OPEC Sources¹

	Algeria	Libya	Saudi Arabia	United Arab Emirates	Indonesia	Iran	Nigeria	Venezuela	Other OPEC ²	Total OPEC	Total Arab OPEC ³
	Thousand Barrels per Day										
1973											
AVERAGE	136	164	486	71	213	223	459	1,135	106	2,993	915
1974											
AVERAGE	190	4	461	74	300	469	713	979	88	3,280	752
1975											
AVERAGE	282	232	715	117	390	280	762	702	122	3,601	1,383
1976											
AVERAGE	432	453	1,230	254	539	298	1,025	700	134	5,066	2,424
1977											
AVERAGE	559	723	1,380	335	541	535	1,143	690	287	6,193	3,185
1978											
AVERAGE	649	654	1,144	385	573	555	919	645	226	5,751	2,963
1979											
AVERAGE	636	658	1,356	281	420	304	1,080	690	212	5,637	3,056
1980											
AVERAGE	488	554	1,261	172	348	9	857	481	130	4,300	2,551
1981											
January	341	500	1,284	93	424	0	908	549	27	4,127	2,219
February	381	468	1,122	93	406	0	866	463	92	3,891	2,064
March	352	485	1,027	47	328	0	771	360	54	3,425	1,912
April	263	485	1,034	68	307	0	812	237	39	3,245	1,867
May	393	443	933	17	297	0	664	331	124	3,203	1,796
June	356	380	865	60	367	0	528	248	118	2,922	1,703
July	333	251	1,073	80	340	0	651	466	38	3,233	1,757
August	348	274	1,082	61	377	0	321	523	84	3,070	1,765
September	336	154	1,477	96	371	0	323	359	149	3,264	2,063
October	242	147	1,342	90	427	0	412	389	172	3,220	1,820
November	210	132	1,270	112	353	0	517	535	56	3,184	1,724
December	176	122	1,045	158	400	0	684	411	132	3,129	1,502
AVERAGE	311	319	1,129	81	366	0	620	406	90	3,323	1,848
1982											
January	254	161	877	87	273	0	662	376	128	2,818	1,378
February	139	92	692	79	236	0	579	347	102	2,267	1,044
March	91	37	555	155	200	0	503	399	91	2,032	860
April	85	0	479	122	215	0	427	411	79	1,818	707
May	179	0	601	116	236	0	211	414	54	1,811	897
June	93	0	593	94	215	72	537	361	110	2,075	799
July	122	0	644	123	327	69	910	349	95	2,640	927
August	170	0	489	133	272	27	542	288	134	2,057	807
September	162	0	432	57	191	21	479	514	52	1,907	659
October	249	7	494	61	227	108	291	496	96	2,029	810
November	247	13	489	47	283	34	480	539	115	2,246	795
December	141	0	237	12	265	88	447	399	73	1,661	407
AVERAGE	161	26	548	91	245	35	505	408	94	2,113	840

¹ Excludes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries.

² Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar.

³ Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait, and Qatar. Totals may not equal sum of components due to independent rounding.

Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil and Petroleum Product Imports from Non-OPEC Sources¹

	Bahamas	Canada	Mexico	Netherlands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico ²	Virgin Islands ²	Other ³	Total
	Thousand Barrels per Day									
1973										
AVERAGE	174	1,325	16	585	255	15	99	329	465	3,263
1974										
AVERAGE	164	1,070	8	511	251	8	90	391	340	2,832
1975										
AVERAGE	152	846	71	332	242	14	90	406	300	2,454
1976										
AVERAGE	118	599	87	275	274	31	88	422	353	2,247
1977										
AVERAGE	171	517	179	211	289	126	105	466	550	2,614
1978										
AVERAGE	160	467	318	229	253	180	94	429	484	2,613
1979										
AVERAGE	147	538	439	231	190	202	92	431	548	2,819
1980										
AVERAGE	78	455	533	225	176	176	88	388	491	2,609
1981										
January	39	543	401	198	150	233	89	494	552	2,701
February	84	546	437	227	163	271	46	481	626	2,881
March	74	472	488	227	93	263	45	370	571	2,603
April	68	412	418	198	139	402	40	365	380	2,423
May	122	365	522	213	105	368	58	344	474	2,573
June	51	353	538	196	124	397	67	262	525	2,513
July	77	382	384	212	178	553	50	206	541	2,583
August	69	378	489	255	123	592	68	184	539	2,698
September	111	423	708	163	169	528	72	265	661	3,100
October	63	449	669	161	121	351	60	303	562	2,739
November	63	547	628	168	108	253	76	294	421	2,557
December	70	501	587	148	125	280	73	367	563	2,714
AVERAGE	74	447	522	197	133	375	62	327	534	2,672
1982										
January	28	509	426	179	106	346	62	334	425	2,415
February	50	533	489	221	120	132	38	354	487	2,424
March	43	435	503	189	118	293	62	307	479	2,429
April	67	357	467	180	166	247	36	266	682	2,468
May	76	416	767	152	95	516	47	302	603	2,974
June	32	462	797	141	129	539	58	322	673	3,153
July	30	527	783	158	111	433	38	369	674	3,122
August	68	435	854	145	106	520	24	320	627	3,099
September	92	484	897	195	89	631	51	270	744	3,453
October	45	456	682	148	109	666	52	262	783	3,202
November	48	547	860	203	90	623	81	334	694	3,480
December	89	561	675	174	102	438	48	336	480	2,901
AVERAGE	56	477	684	173	112	451	50	315	613	2,928

¹ Includes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries.

² U.S. Possessions.

³ Includes all Non-OPEC countries except those shown above.

Totals may not equal sum of components due to independent rounding.

Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Sources

- 1973 through 1976: Bureau of Mines, U.S. Department of the Interior, "Petroleum Statement, Annual" and PAD Districts Supply/Demand, Annual," Mineral Industry Surveys.
- 1977 through 1980: Energy Information Administration, U.S. Department of Energy, "Monthly Petroleum Statistics Report," (unleaded gasoline category).
- 1977 through 1980: Energy Information Administration, U.S. Department of Energy, "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual," "Energy Data Reports.
- January 1981 through December 1981: Energy Information Administration, U.S. Department of Energy, "Petroleum Supply Annual."
- January 1982 through December 1982: Detailed statistics in this issue. (See Explanatory Notes 5.1 through 5.6).
- January 1983: Estimates based on EIA weekly data (except domestic crude oil production). (See Explanatory Note 2.7).
- January 1982 through January 1983: Domestic crude oil production estimate based on historical statistics from State Conservation Agencies and the U.S. Geological Survey. (See Explanatory Note 2.2).

Detailed Statistics





Table 1. U.S. Petroleum Balance, December 1982

	Current Month		Year-to-Date	
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
Crude Oil (Including Lease Condensate)				
Field Production				
(1) Alaska	E 51,538	1,663	E 618,753	1,695
(2) Lower 48 States	E 216,922	6,997	E 2,546,219	6,976
(3) Total U.S.	E 268,460	8,660	E 3,164,972	8,671
Net Imports				
(4) Imports (Gross Excluding SPR)	87,807	2,832	1,202,889	3,296
(5) SPR Imports	3,831	124	60,193	165
(6) Exports	5,970	193	86,279	236
(7) Imports (Net Including SPR)	85,667	2,763	1,176,802	3,224
Other Sources				
(8) SPR Withdrawal (+) or Addition (-)	-3,864	-125	-63,486	-174
(9) Other Stock Withdrawal (+) or Addition (-)	8,291	267	15,728	43
(10) Used Directly and Losses	-1,674	-54	-22,481	-62
(11) Unaccounted for ¹	66	2	26,890	74
(12) Total Other Sources	2,819	91	-43,349	-119
(13) Crude Input to Refineries	356,947	11,514	4,298,425	11,777
(13) = (3) + (7) + (12)				
Natural Gas Plant Liquids (NGPL)				
(14) Field Production	50,790	1,638	567,181	1,554
(15) Imports ²	145	5	7,668	21
(16) Stock Withdrawal (+) or Addition (-) ²	1,359	44	4,493	12
(17) Total NGPL Supply	52,294	1,687	579,342	1,587
Other Liquids				
Unfinished Oils and Gasoline Blending Components, Total				
(18) Stock Withdrawal (+) or Addition (-)	5,907	191	14,764	40
(19) Imports	7,742	250	64,013	175
(20) Other Hydrocarbons and Alcohol New Supply (Field Production)	1,541	50	19,222	53
(21) Refinery Processing Gain ¹	18,958	612	193,050	529
(22) Crude Used Directly	1,621	52	21,419	59
(23) Total Other Liquids	35,769	1,154	312,468	856
(23) = (18) through (22)				
(24) Total Production of Products ³	445,010	14,355	5,190,235	14,220
(24) = (13) + (17) + (23)				
Net Imports of Refined Products ³				
(25) Imports (Gross)	41,905	1,352	505,424	1,385
(26) Exports	20,687	667	211,235	579
(27) Imports (Net)	21,218	684	294,189	806
(28) Total New Supply of Products	466,229	15,040	5,484,425	15,026
(28) = (24) + (27)				
(29) Refined Products Stock Withdrawal (+) or Addition (-) ³	14,534	469	83,222	228
(30) Total Petroleum Products Supplied for Domestic Use	480,763	15,508	5,567,646	15,254
(30) = (28) + (29)				
(31) Finished Motor Gasoline	202,983	6,548	2,386,236	6,538
(32) Naphtha-Type Jet Fuel	6,562	212	75,754	208
(33) Kerosene-Type Jet Fuel	26,081	841	292,529	801
(34) Kerosene	5,806	187	46,791	128
(35) Distillate Fuel Oil	88,522	2,856	976,822	2,676
(36) Residual Fuel Oil	49,654	1,602	618,351	1,694
(37) Liquefied Petroleum Gases and Ethane	52,762	1,702	561,102	1,537
(38) Other	54,908	1,771	723,369	1,982
(39) Total Reclassified ¹	-6,514	-210	-113,306	-310
(40) Total Product Supplied	480,763	15,508	5,567,648	15,254
(40) = (31) through (39)				
Ending Stocks, All Oils				
(41) Crude Oil and Lease Condensate (Excluding SPR)	347,736	—	347,736	—
(42) Strategic Petroleum Reserve (SPR)	293,827	—	293,827	—
(43) Unfinished Oils	105,277	—	105,277	—
(44) Gasoline Blending Components	41,738	—	41,738	—
(45) Natural Gasoline and Unfractionated Stream	11,026	—	11,026	—
(46) Finished Refined Products ³	629,323	—	629,323	—
(47) Total Stocks	1,428,927	—	1,428,927	—

¹ A balancing item.² Includes isopentane, natural gasoline, unfractionated stream, and plant condensate only.³ For products included see Explanatory Note 5.7.

E = Estimated.

— Not Applicable.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1, 2, and 5.7.

Table 2. Supply and Disposition of Crude Oil and Petroleum Products, December 1982
(Thousands of Barrels)

Commodity	Supply				Disposition					
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Used Directly and Losses ²	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 268,460	0	91,638	4,427	67	-1,674	356,947	5,970	0	641,563
Natural Gas Plant Liquids and LRGs	50,440	8,365	8,151	9,714	0	0	18,017	1,740	56,913	106,138
Natural Gasoline and Isopentane	8,444	0	1	319	0	0	4,635	0	4,129	6,007
Unfractionated Stream	-821	0	0	841	0	0	0	0	20	3,573
Plant Condensate	782	0	144	199	0	0	1,123	0	3	1,446
Liquefied Petroleum Gases and Ethane	42,035	8,365	8,006	8,355	0	0	12,259	1,740	52,762	95,112
Ethane	9,211	56	1,558	194	0	0	34	(s)	10,984	5,212
Propane	14,090	8,629	1,632	3,358	0	0	115	1,065	26,528	54,512
Butane	6,477	-159	2,185	4,367	0	0	7,648	675	15,425	15,425
Butane-Propane Mixtures	144	-178	0	-497	0	0	157	0	-688	1,893
Ethane-Propane Mixtures	8,858	0	2,632	-119	0	0	0	0	11,370	9,774
Isobutane	3,256	17	0	1,053	0	0	4,305	0	21	8,297
Other Liquids	1,541	0	7,742	5,907	0	0	21,704	0	-6,514	147,015
Other Hydrocarbons and Alcohol	1,541	0	0	-100	0	0	1,441	0	0	311
Unfinished Oils	0	0	6,672	6,402	0	0	16,350	0	-3,276	105,277
Motor Gasoline Blending Components	0	0	1,070	-254	0	0	4,135	0	-3,319	40,935
Aviation Gasoline Blending Components	0	0	0	-141	0	0	-222	0	81	492
Finished Petroleum Products	350	407,261	33,899	6,180	0	1,621	0	18,947	430,364	534,211
Finished Motor Gasoline	84	202,659	5,523	-5,075	0	0	0	208	202,983	194,436
Finished Leaded Motor Gasoline	69	93,586	3,957	-2,483	0	0	0	208	94,922	98,161
Finished Unleaded Motor Gasoline	14	108,942	1,566	-2,571	0	0	0	0	107,951	96,204
Gasohol	0	131	0	-21	0	0	0	0	110	72
Finished Aviation Gasoline	54	340	(s)	214	0	0	0	0	608	2,306
Naphtha-Type Jet Fuel	0	6,201	0	362	0	0	0	1	6,562	5,673
Kerosene-Type Jet Fuel	(s)	23,216	225	3,332	0	0	0	692	26,081	31,176
Kerosene	2	4,410	477	917	0	0	0	1	5,806	10,428
Distillate Fuel Oil	2	82,294	3,366	6,997	0	297	0	4,436	88,522	178,595
Residual Fuel Oil	0	30,676	23,170	256	0	1,324	0	5,771	49,654	66,175
Naphtha < 400 Deg. for Petro. Feed. Use	0	4,290	6	33	0	0	0	187	4,142	1,967
Other Oils > 400 Deg. for Petro. Feed. Use	0	7,724	0	14	0	0	0	670	7,068	2,180
Special Naphthas	43	1,225	704	-14	0	0	0	24	1,935	3,474
Lubricants	0	3,551	255	117	0	0	0	438	3,485	12,531
Waxes	0	448	110	-32	0	0	0	21	505	786
Petroleum Coke	0	13,352	0	-28	0	0	0	6,308	7,016	6,721
Asphalt	0	7,500	59	-1,793	0	0	0	159	5,608	15,884
Road Oil	0	9	0	7	0	0	0	0	16	47
Still Gas	0	16,825	0	0	0	0	0	0	16,825	0
Miscellaneous Products	164	2,541	3	872	0	0	0	32	3,548	1,832
Total	320,791	415,626	141,430	26,228	67	-53	396,668	26,657	480,763	1,428,927

¹ Unaccounted for crude oil is a balancing item.

² Total equals refinery fuel use and loss.

(s) Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 3. Year-to-Date Supply and Disposition Statistics of Crude Oil and Petroleum Products, January - December 1982
(Thousands of Barrels)

Commodity	Supply					Disposition			Ending Stocks	
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Used Directly and Losses ²	Refinery Inputs	Exports		Products Supplied
Crude Oil (Including lease condensate)	E 3,164,972	0	1,263,081	-47,758	28,890	-22,481	4,298,425	88,279	0	841,563
Natural Gas Plant Liquids and LRGs	561,984	99,019	89,978	44,032	0	0	188,148	23,596	583,269	106,138
Natural Gasoline and Isopentane	76,652	0	5,814	3,386	0	0	64,048	0	21,805	6,007
Unfractionated Stream	-667	0	0	979	0	0	8	0	304	3,573
Plant Condensate	12,131	0	1,854	128	0	0	14,055	0	58	1,446
Liquefied Petroleum Gases and Ethane	473,868	99,019	82,310	39,539	0	0	110,037	23,596	561,102	95,112
Ethane	101,323	1,474	17,240	-298	0	-298	1,378	1	118,359	5,212
Propane	168,079	92,928	22,952	21,046	0	0	1,441	11,457	292,106	54,512
Butane	79,854	3,351	21,551	11,829	0	0	64,787	12,139	39,660	15,425
Butane-Propane Mixtures	1,520	1,235	8,065	-140	0	0	2,001	0	8,678	1,893
Ethane-Propane Mixtures	83,017	0	12,503	6,661	0	0	46	0	102,135	9,774
Isobutane	40,075	31	0	441	0	0	40,384	0	164	8,297
Other Liquids	19,222	0	64,013	14,764	0	0	211,305	0	-113,306	147,015
Other Hydrocarbons and Alcohol	19,222	0	0	-103	0	0	19,119	0	0	311
Unfinished Oils	0	0	49,907	6,071	0	0	129,384	0	-73,406	105,277
Motor Gasoline Blending Components	0	0	14,105	8,597	0	0	63,581	0	-40,879	40,935
Aviation Gasoline Blending Components	0	0	0	199	0	0	-779	0	978	492
Finished Petroleum Products	5,199	4,791,909	423,115	43,683	0	21,419	0	187,639	5,097,685	534,211
Finished Motor Gasoline	629	2,315,896	67,874	9,032	0	0	0	7,195	2,386,236	194,436
Finished Leaded Motor Gasoline	592	1,096,638	43,647	9,924	0	0	0	7,195	1,143,606	98,161
Finished Unleaded Motor Gasoline	37	1,218,043	24,227	-879	0	0	0	0	1,241,429	96,204
Gasohol	0	1,215	0	-13	0	0	0	0	1,202	72
Finished Aviation Gasoline	716	8,176	2	427	0	0	0	0	9,322	2,306
Naphtha-Type Jet Fuel	0	72,977	1,682	1,381	0	0	0	287	75,754	5,673
Kerosene-Type Jet Fuel	2	283,536	7,946	2,835	0	0	0	1,790	292,529	31,176
Kerosene	41	41,941	4,509	615	0	0	0	315	46,791	10,428
Distillate Fuel Oil	28	953,420	33,822	12,946	0	3,731	0	27,124	976,822	178,595
Residual Fuel Oil	0	388,614	276,680	11,817	0	17,688	0	76,448	618,351	66,175
Naphtha < 400 Deg. for Petro. Feed.	0	54,916	16,748	502	0	0	0	1,504	70,662	1,967
Other Oils > 400 Deg. for Petrochem. Feedstock	0	96,523	0	-430	0	0	0	7,238	88,855	2,180
Special Naphthas	886	18,415	7,339	490	0	0	0	1,750	25,380	3,474
Lubricants	0	51,563	3,558	1,773	0	0	0	6,012	50,882	12,531
Waxes	0	5,134	542	-116	0	0	0	252	5,309	786
Petroleum Coke	0	149,360	0	-2,219	0	0	0	56,824	90,317	6,721
Asphalt	0	119,556	1,730	3,703	0	0	0	444	124,545	15,884
Road Oil	0	610	2	-21	0	0	0	0	591	47
Still Gas	0	202,263	0	0	0	0	0	0	202,263	0
Miscellaneous Products	2,897	29,009	680	948	0	0	0	456	33,077	1,832
Total	3,751,377	4,890,928	1,840,187	54,721	26,890	-1,062	4,697,878	297,514	5,567,648	1,428,927

¹ Unaccounted for crude oil is a balancing item.

² Total equals refinery fuel use and loss.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, December 1982
(Thousand Barrels per Day)

Commodity	Supply				Crude Used Directly and Losses ²	Disposition	
	Field Produc- tion	Refinery Produc- tion	Imports	Stock With- drawal(+) Addi- tion(-)	Unac- counted For Crude Oil ¹	Refinery Inputs	Exports Products Supplied
Crude Oil (including lease condensate)	E 8,660	0	2,956	143	2	11,514	193
Natural Gas Plant Liquids and LRGs	1,627	270	263	313	0	581	1,836
Natural Gasoline and Isopentane	272	0	(s)	10	0	150	133
Unfractionated Stream	-26	0	0	27	0	0	1
Plant Condensate	25	0	5	6	0	36	(s)
Liquefied Petroleum Gases and Ethane	1,356	270	258	270	0	395	1,702
Ethane	297	2	50	6	0	1	354
Propane	455	278	53	108	0	4	856
Butane	209	-5	70	141	0	247	147
Butane-Propane Mixtures	5	-6	0	-16	0	5	-22
Ethane-Propane Mixtures	286	0	85	-4	0	0	367
Isobutane	105	1	0	34	0	139	1
Other Liquids	50	0	250	191	0	700	-210
Other Hydrocarbons and Alcohol	50	0	0	-3	0	46	0
Unfinished Oils	0	0	215	207	0	527	-106
Motor Gasoline Blending Components	0	0	35	-8	0	133	-107
Aviation Gasoline Blending Components	0	0	0	-5	0	-7	3
Finished Petroleum Products	11	13,137	1,094	199	0	52	13,883
Finished Motor Gasoline	3	6,537	178	-164	0	0	6,548
Finished Leaded Motor Gasoline	2	3,019	128	-80	0	0	3,062
Finished Unleaded Motor Gasoline	(s)	3,514	51	-83	0	0	3,482
Gasohol	0	4	0	-1	0	0	4
Finished Aviation Gasoline	2	11	(s)	7	0	0	20
Naphtha-Type Jet Fuel	0	200	0	12	0	0	212
Kerosene-Type Jet Fuel	(s)	749	7	107	0	0	841
Kerosene	(s)	142	15	30	0	0	187
Distillate Fuel Oil	(s)	2,655	109	226	0	0	2,856
Residual Fuel Oil	0	990	747	8	0	0	1,602
Naphtha < 400 Deg. for Petro. Feed. Use	0	138	(s)	1	0	0	134
Other Oils > 400 Deg. for Petro. Feed. Use	0	249	0	(s)	0	0	228
Special Naphthas	1	40	23	(s)	0	0	62
Lubricants	0	115	8	4	0	0	112
Waxes	0	14	4	-1	0	0	16
Petroleum Coke	0	431	0	-1	0	0	226
Asphalt	0	242	2	-58	0	0	181
Road Oil	0	(s)	0	(s)	0	0	1
Still Gas	0	543	0	0	0	0	543
Miscellaneous Products	5	82	(s)	28	0	0	114
Total	10,348	13,407	4,562	846	2	12,796	15,508

1 Unaccounted for crude oil is a balancing item.

2 Total equals refinery fuel use and loss.

(s) Less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January - December 1982
(Thousand Barrels per Day)

Commodity	Supply					Disposition			
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) Addition (-)	Unaccounted For Crude Oil ¹	Crude Used Directly and Losses ²	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 8,671	0	3,460	-131	74	-62	11,777	236	0
Natural Gas Plant Liquids and LRGs	1,540	271	247	121	0	0	515	65	1,598
Natural Gasoline and Isopentane	210	0	16	9	0	0	175	0	60
Unfractionated Stream	-2	0	0	3	0	0	(s)	0	1
Plant Condensate	33	0	5	(s)	0	0	39	0	(s)
Liquefied Petroleum Gases and Ethane	1,298	271	226	108	0	0	301	65	1,537
Ethane	278	4	47	-1	0	0	4	(s)	324
Propane	460	255	63	58	0	0	4	31	800
Butane	219	9	59	32	0	0	177	33	109
Butane-Propane Mixtures	4	3	22	(s)	0	0	5	0	24
Ethane-Propane Mixtures	227	0	34	18	0	0	(s)	0	280
Isobutane	110	(s)	0	1	0	0	111	0	(s)
Other Liquids	53	0	175	40	0	0	579	0	-310
Other Hydrocarbons and Alcohol	53	0	0	(s)	0	0	52	0	0
Unfinished Oils	0	0	137	17	0	0	354	0	-201
Motor Gasoline Blending Components	0	0	39	24	0	0	174	0	-112
Aviation Gasoline Blending Components	0	0	0	1	0	0	-2	0	3
Finished Petroleum Products	14	13,129	1,159	120	0	59	0	514	13,966
Finished Motor Gasoline	2	6,345	186	25	0	0	0	20	6,538
Finished Leaded Motor Gasoline	2	3,004	120	27	0	0	0	20	3,133
Finished Unleaded Motor Gasoline	(s)	3,337	66	-2	0	0	0	0	3,401
Gasohol	0	3	0	(s)	0	0	0	0	3
Finished Aviation Gasoline	2	22	(s)	1	0	0	0	0	26
Naphtha-Type Jet Fuel	0	200	5	4	0	0	0	1	208
Kerosene-Type Jet Fuel	(s)	777	22	8	0	0	0	5	801
Kerosene	(s)	115	12	2	0	0	0	1	128
Distillate Fuel Oil	(s)	2,612	93	35	0	10	0	74	2,676
Residual Fuel Oil	0	1,065	758	32	0	48	0	209	1,694
Naphtha < 400 Deg. for Petro. Feed. Use	0	150	46	1	0	0	0	4	194
Other Oils > 400 Deg. for Petro. Feed. Use	0	264	0	-1	0	0	0	20	243
Special Naphthas	2	50	20	1	0	0	0	5	70
Lubricants	0	141	10	5	0	0	0	16	139
Waxes	0	14	1	(s)	0	0	0	1	15
Petroleum Coke	0	409	0	-6	0	0	0	156	247
Asphalt	0	328	5	10	0	0	0	1	341
Road Oil	0	2	(s)	(s)	0	0	0	0	2
Still Gas	0	554	0	0	0	0	0	0	554
Miscellaneous Products	8	79	2	3	0	0	0	1	91
Total	10,278	13,400	5,042	150	74	-3	12,871	815	15,254

¹ Unaccounted for crude oil is a balancing item.

² Total equals refinery fuel use and loss.

(s) Less than 500 barrels per day.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 6. PAD District I, Supply and Disposition of Crude Oil and Petroleum Products, December 1982
(Thousands of Barrels)

Commodity	Field Production	Refinery Production	Imports	Supply Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Used Directly and Losses ²	Net Receipts	Disposition			Ending Stocks
								Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 2,707	0	23,953	1,212	4,093	3	3,130	35,098	0	0	17,512
Natural Gas Plant Liquids and LRGs	1,031	1,383	558	191	0	0	2,554	310	53	5,354	5,252
Liquefied Petroleum Gases	476	1,383	489	181	0	0	2,554	293	53	4,738	5,225
Ethane	319	0	0	0	0	0	0	0	0	319	0
Other Products ³	236	0	69	10	0	0	0	17	0	297	27
Other Liquids	178	0	2,603	789	0	0	506	4,799	0	-723	19,051
Other Hydrocarbons and Alcohol	178	0	0	-94	0	0	0	84	0	0	109
Unfinished Oils	0	0	2,291	1,179	0	0	506	4,722	0	-746	13,656
Motor Gasoline Blending Components	0	0	312	-291	0	0	0	-2	0	23	5,281
Aviation Gasoline Blending Components	0	0	0	-5	0	0	0	-5	0	0	5
Finished Petroleum Products	33	41,387	29,232	10,823	0	0	77,626	0	1,437	157,663	202,008
Finished Motor Gasoline	33	20,476	4,597	-1,040	0	0	43,015	0	1	67,080	62,206
Finished Leaded Motor Gasoline	24	8,013	3,291	-309	0	0	17,832	0	1	28,849	29,090
Finished Unleaded Motor Gasoline	9	12,463	1,307	-726	0	0	25,183	0	0	38,236	33,105
Gasohol	0	0	0	-5	0	0	0	0	0	-5	12
Finished Aviation Gasoline	0	0	(s)	88	0	0	151	0	0	239	428
Naphtha-Type Jet Fuel	0	456	0	-144	0	0	510	0	0	822	514
Kerosene-Type Jet Fuel	0	689	225	1,017	0	0	8,086	0	293	9,724	9,057
Kerosene	0	476	359	557	0	0	1,162	0	(s)	2,554	5,207
Distillate Fuel Oil	0	9,004	3,260	8,103	0	0	19,976	0	779	39,564	80,588
Residual Fuel Oil	0	4,784	20,311	1,635	0	0	2,877	0	(s)	29,607	34,734
Naphtha and Other Oils for Petrochem.	0	419	2	91	0	0	89	0	42	559	107
Feedstock	0	23	62	-53	0	0	263	0	3	292	893
Special Naphthas	0	457	188	34	0	0	552	0	68	1,163	3,279
Lubricants	0	107	52	-19	0	0	7	0	5	142	194
Waxes	0	1,180	0	373	0	0	0	0	80	1,473	801
Petroleum Coke	0	1,193	58	149	0	0	192	0	154	1,438	3,619
Asphalt	0	0	0	0	0	0	0	0	0	0	0
Road Oil	0	1,777	0	0	0	0	0	0	0	1,777	0
Still Gas	0	463	(s)	32	0	0	746	0	12	1,229	381
Miscellaneous Products	0	0	0	0	0	0	0	0	0	0	0
Total	3,949	42,770	56,345	13,015	4,093	3	83,816	40,207	1,490	162,294	243,824

1 Unaccounted for crude oil is a balancing item.

2 Total equals refinery fuel use and loss.

3 Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 7. PAD District II Supply and Disposition of Crude Oil and Petroleum Products, December 1982
(Thousands of Barrels)

Commodity	Supply					Disposition					
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Used Directly and Losses ²	Net Receipts	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 32,054	0	19,643	-725	31,938	-5	1,314	84,183	36	0	76,469
Natural Gas Plant Liquids and LRGs	9,813	2,503	6,273	362	0	0	5,711	6,241	360	18,060	31,088
Liquefied Petroleum Gases	8,293	2,480	4,715	1,019	0	0	4,617	4,817	360	15,947	24,317
Ethane	2,753	23	1,558	-349	0	0	0	0	0	3,984	2,109
Other Products ³	-1,233	0	0	-307	0	0	1,094	1,424	0	-1,871	4,662
Other Liquids	176	0	388	1,238	0	0	987	4,414	0	-1,625	27,083
Other Hydrocarbons and Alcohol	176	0	0	18	0	0	0	194	0	0	70
Unfinished Oils	0	0	253	2,207	0	0	73	2,661	0	-128	17,784
Motor Gasoline Blending Components	0	0	134	-942	0	0	914	1,604	0	-1,498	9,080
Aviation Gasoline Blending Components	0	0	0	-45	0	0	0	-45	0	0	149
Finished Petroleum Products	12	96,202	446	-3,809	0	0	19,656	0	339	112,168	131,573
Finished Motor Gasoline	0	54,741	6	-284	0	0	11,973	0	1	66,435	56,167
Finished Leaded Motor Gasoline	0	27,167	4	-617	0	0	5,918	0	1	32,471	30,378
Finished Unleaded Motor Gasoline	0	27,527	2	348	0	0	6,055	0	0	33,932	25,737
Gasohol	0	47	0	-15	0	0	0	0	0	32	52
Finished Aviation Gasoline	0	54	0	25	0	0	72	0	0	151	542
Naphtha-Type Jet Fuel	0	924	0	24	0	0	96	0	0	1,044	1,304
Kerosene-Type Jet Fuel	0	3,860	0	-189	0	0	1,571	0	0	5,242	7,264
Kerosene	0	867	0	149	0	0	170	0	0	1,186	2,646
Distillate Fuel Oil	2	20,082	1	-1,754	0	0	5,659	0	0	23,990	47,011
Residual Fuel Oil	0	3,573	305	-226	0	0	-302	0	0	3,350	5,222
Naphtha and Other Oils for Petro. Feed.	0	1,645	4	-107	0	0	-24	0	21	1,496	368
Special Naphthas	0	324	112	32	0	0	87	0	2	554	630
Lubricants	0	737	14	-162	0	0	91	0	11	668	2,088
Waxes	0	46	3	-11	0	0	0	0	(s)	38	79
Petroleum Coke	0	3,318	0	59	0	0	0	0	302	3,075	1,974
Asphalt	0	2,314	1	-1,362	0	0	341	0	1	1,293	6,133
Road Oil	0	-3	0	5	0	0	0	0	0	2	15
Still Gas	0	3,574	0	0	0	0	0	0	0	3,574	0
Miscellaneous Products	10	146	0	-8	0	0	-78	0	1	69	130
Total	42,055	98,705	26,750	-2,934	31,938	-5	27,668	94,838	735	128,603	268,213

¹ Unaccounted for crude oil is a balancing item.

² Total equals refinery fuel use and loss.

³ Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 8. PAD District III Supply and Disposition of Crude Oil and Petroleum Products, December 1982
(Thousands of Barrels)

Commodity	Supply					Disposition					
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Used Directly and Losses ²	Net Receipts	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 130,039	0	40,197	2,570	-24,423	-37	12,377	160,723	0	0	451,592
Natural Gas Plant Liquids and LRGs	36,238	3,575	0	8,787	0	0	-7,975	9,476	1,167	29,982	66,760
Liquefied Petroleum Gases	22,524	3,559	0	6,645	0	0	-7,235	5,485	1,167	18,841	57,650
Ethane	6,110	16	0	544	0	0	0	34	(s)	6,636	3,102
Other Products ³	7,604	0	0	1,598	0	0	-740	3,957	0	4,505	6,008
Other Liquids	677	0	4,316	3,576	0	0	-1,839	10,687	0	-3,957	63,094
Other Hydrocarbons and Alcohol	677	0	0	-19	0	0	0	658	0	0	127
Unfinished Oils	0	0	4,122	2,700	0	0	-925	7,810	0	-1,913	46,209
Motor Gasoline Blending Components	0	0	194	1,002	0	0	-914	2,401	0	-2,119	16,442
Aviation Gasoline Blending Components	0	0	0	-107	0	0	0	-182	0	75	316
Finished Petroleum Products	238	186,432	2,560	4,576	0	9	-101,071	0	10,695	82,048	130,670
Finished Motor Gasoline	0	89,215	(s)	-1,719	0	0	-56,886	0	191	30,419	49,765
Finished Leaded Motor Gasoline	0	40,141	(s)	-582	0	0	-24,660	0	191	14,708	25,056
Finished Unleaded Motor Gasoline	0	49,073	0	-1,137	0	0	-32,226	0	0	15,710	24,709
Gasohol	0	1	0	0	0	0	0	0	0	1	0
Finished Aviation Gasoline	54	161	0	61	0	0	-246	0	0	30	655
Naphtha-Type Jet Fuel	0	3,070	0	252	0	0	-762	0	0	2,560	2,294
Kerosene-Type Jet Fuel	(s)	11,621	0	2,221	0	0	-10,584	0	373	2,885	8,961
Kerosene	2	2,918	0	242	0	0	-1,332	0	0	1,831	2,387
Distillate Fuel Oil	(s)	38,500	8	2,615	0	0	-25,975	0	3,162	11,986	34,243
Residual Fuel Oil	0	11,990	1,926	-133	0	9	-2,952	0	3,188	7,653	16,274
Naphtha and Other Oils for Petro. Feed.	0	9,005	0	180	0	0	-65	0	787	8,333	2,857
Special Naphthas	43	799	520	77	0	0	-350	0	18	1,072	1,677
Lubricants	0	2,074	53	292	0	0	-731	0	295	1,393	5,857
Waxes	0	212	49	10	0	0	-7	0	10	255	446
Petroleum Coke	0	5,068	0	-127	0	0	0	0	2,653	2,288	929
Asphalt	0	2,595	0	-240	0	0	-533	0	1	1,821	3,317
Road Oil	0	0	0	1	0	0	0	0	0	1	0
Still Gas	0	7,449	0	0	0	0	0	0	0	7,449	0
Miscellaneous Products	137	1,755	3	844	0	0	-648	0	16	2,075	1,009
Total	167,192	190,007	47,072	19,509	-24,423	-28	-98,508	180,886	11,862	108,073	712,116

1 Unaccounted for crude oil is a balancing item.

2 Total equals refinery fuel use and loss.

3 Includes natural gasoline, isopentane, unrefined stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 9. PAD District IV Supply and Disposition of Crude Oil and Petroleum Products, December 1982
(Thousands of Barrels)

Commodity	Supply					Disposition			Ending Stocks		
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Used Directly and Losses ²	Net Receipts	Refinery Inputs		Exports	Products Supplied
Crude Oil (including lease condensate)	E 17,473	0	1,774	-551	-4,841	0	0	13,855	0	0	13,436
Natural Gas Plant Liquids and LRGs	2,390	87	647	84	0	0	-290	630	(s)	2,288	1,267
Liquefied Petroleum Gases	905	87	571	25	0	0	64	502	(s)	1,150	994
Ethane	29	0	0	-1	0	0	0	0	0	28	1
Other Products ³	1,456	0	76	60	0	0	-354	128	0	1,110	272
Other Liquids	75	0	0	-540	0	0	0	-766	0	301	5,159
Other Hydrocarbons and Alcohol	75	0	0	0	0	0	0	75	0	0	0
Unfinished Oils	0	0	0	47	0	0	0	-486	0	533	2,686
Motor Gasoline Blending Components	0	0	0	-587	0	0	0	-355	0	-232	2,473
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0
Finished Petroleum Products	67	13,799	9	-1,869	0	0	289	0	2	12,293	14,171
Finished Motor Gasoline	51	7,288	0	-809	0	0	168	0	0	6,697	6,086
Finished Leaded Motor Gasoline	45	4,850	0	-678	0	0	-161	0	0	4,056	3,954
Finished Unleaded Motor Gasoline	6	2,438	0	-132	0	0	329	0	0	2,641	2,131
Gasohol	0	0	0	0	0	0	0	0	0	0	1
Finished Aviation Gasoline	0	26	0	-12	0	0	23	0	0	37	67
Naphtha-Type Jet Fuel	0	418	0	-3	0	0	-170	0	0	245	349
Kerosene-Type Jet Fuel	0	487	0	-15	0	0	656	0	0	1,128	638
Kerosene	0	90	0	-8	0	0	0	0	0	82	42
Distillate Fuel Oil	0	3,651	(s)	-515	0	0	-388	0	0	2,748	4,024
Residual Fuel Oil	0	431	9	-121	0	0	0	0	0	319	634
Naphtha and Other Oils for Petro. Feed	0	0	0	0	0	0	0	0	(s)	(s)	0
Special Naphthas	0	4	(s)	-1	0	0	0	0	(s)	3	9
Lubricants	0	33	0	-15	0	0	0	0	(s)	18	84
Waxes	0	13	0	0	0	0	0	0	0	13	10
Petroleum Coke	0	327	0	-63	0	0	0	0	(s)	264	776
Asphalt	0	489	0	-307	0	0	0	0	1	181	1,451
Road Oil	0	0	0	0	0	0	0	0	0	0	0
Still Gas	0	517	0	0	0	0	0	0	0	517	0
Miscellaneous Products	17	25	0	1	0	0	0	0	(s)	42	1
Total	20,005	13,886	2,430	-2,876	-4,841	0	-1	13,719	3	14,882	34,033

¹ Unaccounted for crude oil is a balancing item.² Total equals refinery fuel use and loss.³ Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 10. PAD District V Supply and Disposition of Crude Oil and Petroleum Products, December 1982
(Thousands of Barrels)

(Thousands of Barrels)											
Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Used Directly and Losses ²	Net Receipts	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 86,187	0	6,071	1,921	-6,701	-1,635	-16,821	63,088	5,934	0	80,554
Natural Gas Plant Liquids and LRGs	969	817	673	290	0	0	0	1,360	160	1,229	1,771
Liquefied Petroleum Gases	626	800	673	291	0	0	0	1,128	160	1,102	1,714
Ethane	0	17	0	0	0	0	0	0	0	17	0
Other Products ³	342	0	0	-1	0	0	0	232	0	110	57
Other Liquids	435	0	436	844	0	0	346	2,570	0	-509	32,628
Other Hydrocarbons and Alcohol	435	0	0	-5	0	0	0	430	0	0	5
Unfinished Oils	0	0	7	269	0	0	346	1,643	0	-1,021	24,942
Motor Gasoline Blending Components	0	0	429	564	0	0	0	487	0	506	7,659
Aviation Gasoline Blending Components	0	0	0	16	0	0	0	10	0	6	22
Finished Petroleum Products	0	69,441	1,653	-3,541	0	1,612	3,500	0	6,474	66,192	55,788
Finished Motor Gasoline	0	30,939	920	-1,222	0	0	1,730	0	15	32,352	20,212
Finished Leaded Motor Gasoline	0	13,415	663	-297	0	0	1,071	0	15	14,837	9,683
Finished Unleaded Motor Gasoline	0	17,441	257	-924	0	0	659	0	0	17,433	10,522
Gasohol	0	83	0	-1	0	0	0	0	0	82	7
Finished Aviation Gasoline	0	99	0	52	0	0	0	0	0	151	614
Naphtha-Type Jet Fuel	0	1,333	0	233	0	0	326	0	1	1,891	1,212
Kerosene-Type Jet Fuel	0	6,559	0	298	0	0	271	0	26	7,102	5,256
Kerosene	0	176	1	-23	0	0	0	0	(s)	153	146
Distillate Fuel Oil	0	11,057	97	-1,452	0	297	728	0	495	10,232	12,729
Residual Fuel Oil	0	9,898	618	-899	0	1,315	377	0	2,584	8,726	9,311
Naphtha and Other Oils for Petro. Feed	0	945	1	-117	0	0	0	0	6	823	815
Special Naphthas	0	75	10	-69	0	0	0	0	1	15	265
Lubricants	0	250	(s)	-32	0	0	88	0	63	243	1,223
Waxes	0	70	6	-12	0	0	0	0	6	58	57
Petroleum Coke	0	3,459	0	-270	0	0	0	0	3,273	-84	2,241
Asphalt	0	909	0	-33	0	0	0	0	0	875	1,364
Road Oil	0	12	0	1	0	0	0	0	1	13	32
Still Gas	0	3,508	0	0	0	0	0	0	0	0	0
Miscellaneous Products	0	152	0	4	0	0	-20	0	3	133	311
Total	87,591	70,258	8,832	-486	-6,701	-23	-12,975	67,018	12,568	66,911	170,741

1 Unaccounted for crude oil is a balancing item.

2 Total equals refinery fuel use and loss.

3 Includes natural gasoline, isopentane, unrefractionated stream, and plant condensate.

(^s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 11. Production of Crude Oil (Including Lease Condensate) by PAD District and State, for the Most Current Month,¹ October 1982
(Thousands of Barrels)

PAD District and State	Production	
	Total	Daily Average
PAD District I		
Florida	2,049	66
New York	E 71	2
Pennsylvania	E 317	10
Virginia	0	0
West Virginia	E 295	10
Total	E 2,732	88
PAD District II		
Illinois	2,590	84
Indiana	E 401	13
Kansas	5,943	192
Kentucky	E 556	18
Michigan	2,585	83
Missouri	E 19	1
Nbraska	572	18
North Dakota	4,170	135
Ohio	E 1,151	37
Oklahoma	13,533	437
South Dakota	92	3
Tennessee	103	3
Total	E 31,715	1,023
PAD District III		
Alabama	1,498	48
Arkansas	E 1,601	52
Louisiana		
Gulf Coast	36,674	1,183
Rest Of State	3,037	98
Total Louisiana	39,711	1,281
Mississippi	2,775	90
New Mexico		
Northwestern	553	18
Southeastern	5,652	182
Total New Mexico	6,205	200
Texas		
TRRC District 01	2,128	69
TRRC District 02	3,439	111
TRRC District 03	11,496	371
TRRC District 04	2,368	76
TRRC District 05	660	21
TRRC District 06, excluding East Texas	3,532	114
TRRC District 07B	2,798	90
TRRC District 07C	2,866	92
TRRC District 08	19,567	631
TRRC District 08A	19,873	641
TRRC District 09	3,252	105
TRRC District 10	1,698	55
East Texas	4,437	143
Total Texas	78,114	2,520
Total	E 129,904	4,190
PAD District IV		
Colorado	2,562	83
Montana	2,585	83
Utah	E 1,949	63
Wyoming	E 10,192	329
Total	E 17,288	558
PAD District V		
Alaska		
South Alaska	2,316	75
North Slope	50,565	1,631
Total Alaska	52,881	1,706
Arizona	26	1
California		
Central Coastal	6,560	212
East Central	21,208	684
North	17	1
South	6,810	220
Total California	34,595	1,116
Nevada	51	2
Total	87,553	2,824
United States Total	E 269,192	8,684

¹ Includes offshore production.

Sources: See Explanatory Notes on Data Collection and Estimation.

E Estimated.

Table 12. Offshore Production of Crude Oil (Including Lease Condensate) By State, for the Most Current Month,¹ October 1982
(Thousands of Barrels)

State	Offshore Production	
	Total	Daily Average
Alaska ²	2,039	66
California		
Federal	2,530	82
State	3,233	104
California, Total	5,763	186
Louisiana		
Federal	23,899	771
State	2,075	67
Louisiana, Total	25,974	838
Texas		
Federal	1,553	50
State	142	5
Texas, Total	1,695	55
United States Total	35,471	1,144

¹ These production data are included in Table 11.

² All offshore production within State boundaries.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 13. Production of Lease Condensate by State, for the Most Current Month,¹ October 1982
(Thousands of Barrels)

State	Lease Condensate Production	
	Total	Daily Average
Alabama	844	27
California	11	(s)
Louisiana	5,261	170
Mississippi	183	6
New Mexico	365	12
Oklahoma	882	28
Texas	3,602	116
Total	11,148	360

¹ These production data are included in Table 11. Small amounts of lease condensate are known to be produced in states other than those listed, however, statistics on this production are not available.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 14. Natural Gas Processing Plant Production of Petroleum Products by PAD District,¹ December 1982
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III			Total		PAD District IV		United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Rocky Mt.	Dist. V West Coast	
Natural Gas Plant Liquids	580	450	1,031	1	1,934	424	7,453	9,813	19,994	3,020	8,767	787	3,670	2,390	969	50,440
Isopentane	0	0	0	0	0	0	400	400	410	43	41	0	0	2	0	895
Natural Gasoline	79	34	113	0	59	88	1,122	1,269	1,615	2,184	1,226	114	292	386	349	7,548
Unfractionated Stream	36	86	123	1	886	81	-3,940	-2,972	10,183	-13,111	1,404	167	2,343	985	-6	-821
Plant Condensate	0	0	0	0	42	0	29	70	256	501	19	-85	2	694	0	782
Liquefied Petroleum Gases and Ethane	465	330	795	0	947	256	9,843	11,046	7,530	13,402	6,077	592	1,033	934	626	42,035
Ethane	150	169	319	0	403	0	2,350	2,753	909	2,994	2,085	46	77	6,110	29	9,211
Propane	189	108	297	0	384	157	3,262	3,803	2,711	3,627	2,060	177	488	9,044	370	14,090
Butane	104	35	139	0	68	88	1,337	1,493	1,225	1,922	718	208	256	4,328	197	6,477
Butane-Propane Mixtures	0	0	0	0	6	0	0	6	67	16	(s)	14	0	97	41	144
Ethane-Propane Mixtures	0	0	0	0	49	0	2,342	2,391	2,042	3,649	627	0	148	6,467	0	8,858
Isobutane	22	18	40	0	37	11	552	600	576	1,195	587	147	84	2,589	18	3,256
Finished Motor Gasoline	33	0	33	0	0	0	0	0	0	0	0	0	0	0	51	84
Finished Leaded Motor Gasoline	24	0	24	0	0	0	0	0	0	0	0	0	0	0	45	69
Finished Unleaded Motor Gasoline	9	0	9	0	0	0	0	0	0	0	0	0	0	0	6	14
Gasohol	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Aviation Gasoline	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	54
Naphtha-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	(s)	0	0	0	(s)
Kerosene	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	2
Disillate Fuel Oil	0	0	0	0	0	0	2	2	(s)	0	0	0	0	0	0	2
Special Naphthas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43
Miscellaneous Products	0	0	0	0	1	0	9	10	115	2	4	13	2	137	17	164
Total Production	613	450	1,064	1	1,935	424	7,464	9,825	20,207	3,022	8,771	801	3,675	2,457	969	50,790

¹ Production represents quantity of natural gas processing plant output less input to fractionating facilities.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 15. Refinery Input of Crude Oil and Petroleum Products by PAD District, December 1982
(Thousands of Barrels, Except Where Noted)

(Thousands of Barrels, Except Where Noted)																
Commodity	PAD District I		PAD District II					PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Appalachian #2	Ill., Ky.	Ind., Wisc., Daks.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Rocky Mt.	Dist. V West Coast
Crude Oil (including lease condensate)	32,271	2,827	35,098	1,723	52,920	7,994	21,546	84,183	14,164	79,021	60,538	4,667	2,333	160,723	13,855	63,088
Natural Gas Plant Liquids	17	0	17	0	407	85	794	1,286	779	1,862	171	102	93	3,007	93	232
Natural Gasoline and Isopentane	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unfractionated Stream	0	0	0	0	126	0	12	138	51	678	0	220	1	950	35	1,123
Plant Condensate	250	43	293	179	2,851	480	1,307	4,817	749	2,175	2,402	129	64	5,519	502	1,128
LPG and Ethane	0	0	0	0	0	0	0	0	0	0	34	0	0	34	0	34
Ethane	0	0	0	0	64	0	0	64	0	0	48	0	0	48	3	115
Propane	195	0	195	101	1,347	359	812	2,619	286	995	1,255	38	16	2,590	149	516
Normal Butane	0	0	0	0	537	57	49	643	131	80	77	0	0	288	279	369
Other Butanes	0	0	0	0	4	0	0	4	0	72	48	0	25	145	8	157
Butane-Propane Mixtures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethane-Propane Mixtures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Isobutane	55	43	98	78	899	64	446	1,487	332	1,028	940	91	23	2,414	63	243
Other Liquids	68	0	68	0	180	0	14	194	17	445	196	0	0	658	75	419
Other Hydrocarbons	0	16	16	0	0	0	0	0	0	0	0	0	0	0	0	11
Alcohol	4,659	63	4,722	15	1,484	-37	1,199	2,661	386	3,798	3,256	264	106	7,810	-486	1,643
Unfinished Oil (net)	-12	10	-2	2	1,878	-93	-183	1,604	-642	525	2,602	-39	-45	2,401	-355	487
Motor Gasoline Blending Components (net)	-5	0	-5	0	-43	0	-2	-45	-76	-45	-61	0	0	-182	0	10
Aviation Gasoline Blending Components (net)	37,248	2,959	40,207	1,919	59,803	8,429	24,687	94,838	15,428	88,459	69,104	5,343	2,552	180,886	13,719	67,018
Total Input to Refineries																
Crude Oil Distillation																
Gross Input (daily average)	1,069	91	1,160	62	1,749	271	704	2,786	494	2,671	2,026	160	85	5,437	452	2,066
Operable Capacity (daily average)	1,644	117	1,762	66	2,339	295	858	3,559	618	4,192	2,756	267	107	7,939	589	3,159
Operating Ratio (percent) ¹	65.0	77.3	65.8	93.7	74.8	91.7	82.0	78.3	80.0	63.7	73.5	60.1	79.8	68.5	76.8	65.4
Crude Oil Qualities																
Sulfur Content, Weighted Average (percent) .....	.91	.28	.86	.47	.93	1.56	.56	.89	.60	.93	.80	1.59	.35	.86	.88	1.00
API Gravity, Weighted Average	31.41	40.40	32.14	38.00	35.52	31.23	37.15	35.58	38.28	34.60	33.94	32.15	39.55	34.68	35.37	26.50

¹ Represents gross input divided by operable capacity.
Note: Total may not equal sum of components due to independent rounding.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 16. Refinery Production of Petroleum Products by PAD District, December 1982
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III				Total		PAD		United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Dist. IV Rocky Mt.	Dist. V West Coast	
Liquefied Petroleum Gases and Ethane	1,370	13	1,383	42	1,560	291	810	2,503	251	2,099	1,074	75	76	3,575	87	817	8,365
For Petrochemical Feedstock Use	296	0	296	0	199	0	75	274	17	1,189	252	14	0	1,472	16	164	2,222
For Other Uses	1,074	13	1,087	42	1,361	291	535	2,229	234	910	822	81	76	2,103	71	853	8,143
Ethane	0	0	0	0	23	0	0	23	0	5	11	0	0	16	0	17	56
For Petrochemical Feedstock Use	0	0	0	0	0	0	0	0	0	5	11	0	0	18	0	0	16
For Other Uses	0	0	0	0	23	0	0	23	0	0	0	0	0	0	0	17	40
Propane	1,193	13	1,206	42	1,517	287	623	2,469	258	2,115	1,367	50	47	3,837	194	923	8,629
For Petrochemical Feedstock Use	249	0	249	0	199	0	75	274	0	887	157	0	0	1,044	16	154	1,737
For Other Uses	944	13	957	42	1,318	287	548	2,195	258	1,228	1,210	50	47	2,793	178	769	8,892
Butane	177	0	177	0	20	4	-13	11	-24	21	-266	23	6	-240	-18	-89	-159
For Petrochemical Feedstock Use	47	0	47	0	0	0	0	0	0	297	61	14	0	372	0	10	429
For Other Uses	130	0	130	0	20	4	-13	11	-24	-276	-327	9	6	-612	-18	-99	-588
Butane-Propane Mixtures	0	0	0	0	0	0	0	0	0	-42	-38	2	23	-55	-89	-34	-178
For Petrochemical Feedstock Use	0	0	0	0	0	0	0	0	0	0	0	0	0	23	0	23	0
For Other Uses	0	0	0	0	0	0	0	0	0	-42	-61	2	23	-78	-89	-34	-201
Isobutane for Petro. Feed. Use	0	0	0	0	0	0	0	0	17	0	0	0	0	17	0	0	17
Finished Motor Gasoline	19,320	1,156	20,476	1,110	35,203	4,402	14,026	54,741	8,192	43,431	34,568	1,957	1,067	89,215	7,288	30,939	202,659
Finished Leaded Motor Gasoline	7,424	589	8,013	549	16,348	2,348	7,922	27,167	4,158	17,635	16,437	1,261	650	40,141	4,850	13,415	93,586
Finished Unleaded Motor Gasoline	11,896	567	12,463	561	18,813	2,054	6,099	27,527	4,033	25,796	18,131	696	417	49,073	2,438	17,441	109,942
Gasohol	0	0	0	0	42	0	5	47	1	0	0	0	0	1	0	83	131
Finished Aviation Gasoline	0	0	0	0	35	0	19	54	5	150	6	0	0	161	26	99	340
Naphtha-Type Jet Fuel	418	38	456	61	382	77	404	924	730	1,407	468	141	324	3,070	418	1,333	6,201
Kerosene-Type Jet Fuel	689	0	689	101	2,961	237	561	3,860	724	4,030	6,830	16	21	11,821	487	6,559	23,216
Kerosene	261	98	359	0	733	87	47	867	50	1,412	1,437	-2	21	2,918	90	176	4,410
Distillate Fuel Oil	8,297	707	9,004	364	10,988	2,322	6,408	20,082	3,448	20,182	12,511	1,493	866	38,500	3,651	11,057	82,294
Distillate Fuel Oil Less No. 4	8,297	704	9,001	364	10,939	2,322	6,408	20,033	3,409	20,356	12,494	1,424	651	38,334	3,618	10,961	81,947
No. 4 Fuel Oil	0	3	3	0	49	0	0	49	39	-174	17	69	215	166	33	96	347
Residual Fuel Oil	4,475	309	4,784	143	2,648	341	441	3,573	589	5,551	5,312	456	82	11,990	431	9,898	30,676
Naphtha < 400 Deg. For Petro. Feed. Use	412	0	412	0	91	0	116	207	453	2,697	365	1	0	3,516	0	155	4,290
Other Oils > 400 Deg. For Petro. Feed. Use	7	0	7	0	1,437	0	1	1,438	-61	2,780	2,725	45	0	5,489	0	790	7,724
Special Naphthas	12	11	23	0	195	0	129	324	130	491	29	149	0	799	4	75	1,225
Lubricants	85	372	457	0	359	0	378	737	22	1,272	580	200	0	2,074	33	250	3,551
Bright Stock	13	137	150	0	11	0	36	47	0	141	216	0	0	357	5	12	571
Neutral	0	221	221	0	275	0	269	544	0	644	236	87	0	967	28	178	1,938
Other Grades	72	14	86	0	73	0	73	146	22	487	128	113	0	750	0	60	1,042
Wax	17	90	107	0	8	0	38	46	8	109	62	33	0	212	13	70	448
Microcrystalline	1	17	18	0	0	0	1	1	8	9	2	33	0	52	0	0	71
Crystalline-Fully Refined	10	28	38	0	6	0	28	34	0	64	60	0	0	124	13	47	256
Crystalline-Other	6	45	51	0	2	0	9	11	0	36	0	0	0	36	0	23	121
Petroleum Coke	1,160	20	1,180	29	2,046	330	913	3,318	294	2,802	1,805	157	10	5,068	327	3,459	13,352
Marketable	325	0	325	0	1,192	210	629	2,031	67	1,335	1,032	132	0	2,566	171	2,618	7,711
Catalyst	835	20	855	29	854	120	284	1,287	227	1,467	773	25	10	2,502	156	841	5,641
Asphalt	1,173	20	1,193	60	1,232	530	492	2,314	437	399	1,188	502	69	2,595	489	909	7,500
Road Oil	0	0	0	0	-3	0	0	-3	0	0	0	0	0	0	0	12	9
Still Gas	1,648	129	1,777	69	2,281	262	962	3,574	427	4,446	2,343	186	47	7,449	517	3,508	16,825
For Petrochemical Feedstock Use	20	0	20	0	1	0	0	1	6	609	79	0	0	694	22	130	867
For Other Uses	1,628	129	1,757	69	2,280	262	962	3,573	421	3,837	2,264	186	47	6,755	495	3,378	15,958
Miscellaneous Products	441	22	463	3	65	24	54	146	118	716	900	21	0	1,755	25	152	2,541
Total Output	39,785	2,985	42,770	1,982	62,221	8,903	25,599	98,705	15,817	93,974	72,203	5,430	2,583	190,007	13,886	70,258	415,626
Processing Gain(-) or Loss(+) ¹	-2,537	-26	-2,563	-63	-2,418	-474	-912	-3,867	-389	-5,515	-3,099	-87	-31	-9,121	-167	-3,240	-18,958

¹ Represents the arithmetic difference between input and output.
Notes: Total may not equal sum of components due to independent rounding.
See Explanatory Notes on negative product yield.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 17. Percent Refinery Yield of Petroleum Products by PAD District,¹ December 1982

Commodity	PAD District I			PAD District II				PAD District III					PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Rocky Mt.	West Coast
Finished Motor Gasoline ²	51.4	37.6	50.4	53.5	54.7	49.4	53.1	53.8	49.7	45.6	45.8	31.3	39.1	45.5	51.9	44.3	48.0
Finished Aviation Gasoline ³	(s)	.0	(s)	.0	.1	.0	.1	.1	.6	.2	.1	.0	.0	.2	.2	.1	.2
Liquefied Refinery Gases & Ethane	3.7	.4	3.5	2.4	2.9	3.7	2.7	2.9	1.7	2.5	1.7	1.5	3.1	2.1	.7	1.3	2.2
Naphtha-Type Jet Fuel	1.1	1.3	1.1	3.5	.7	1.0	1.8	1.1	5.0	1.7	.7	2.9	13.3	1.8	3.1	2.1	1.7
Kerosene-Type Jet Fuel	1.9	0	1.7	5.8	5.4	3.0	2.5	4.4	5.0	4.9	10.7	.3	.9	6.9	3.6	10.1	6.2
Kerosene .....	.7	3.4	.9	0	1.3	1.1	.2	1.0	.3	1.7	2.3	(s)	.9	1.7	.7	.3	1.2
Distillate Fuel Oil	22.5	24.5	22.6	20.9	20.2	29.2	28.2	23.1	23.7	24.4	19.6	30.3	35.5	22.8	27.3	17.1	22.0
Residual Fuel Oil	12.1	10.7	12.0	8.2	4.9	4.3	1.9	4.1	4.0	6.7	8.3	9.2	3.4	7.1	3.2	15.3	8.2
Naphtha < 400 Deg. F. Petro. Feed. Use	1.1	0	1.0	0	.2	0	.5	.2	3.1	3.3	.6	(s)	0	2.1	0	.2	1.1
Other Oils > 400 Deg. F. Petro. Feed. Use	(s)	.4	(s)	0	2.6	0	(s)	1.7	.4	3.4	4.3	.9	0	3.3	0	1.2	2.1
Special Naphthas	(s)	.4	.1	0	.4	0	.6	.4	.9	.6	(s)	3.0	0	.5	(s)	.1	.3
Lubricants .....	.2	12.9	1.1	0	.7	0	1.7	.8	.2	1.5	.9	4.1	0	1.2	.2	.4	1.0
Wax	(s)	3.1	.3	0	(s)	0	.2	.1	.1	.1	.1	.7	0	.1	.1	.1	.1
Petroleum Coke	3.1	.7	3.0	1.7	3.8	4.1	4.0	3.8	2.0	3.4	2.8	3.2	.4	3.0	2.4	5.3	3.6
Asphalt	3.2	.7	3.0	3.5	2.3	6.7	2.2	2.7	3.0	.5	1.9	10.2	2.8	1.5	3.7	1.4	2.0
Road Oil	0	0	0	0	(s)	0	0	(s)	0	0	0	.0	0	.0	0	(s)	(s)
Still Gas for Petro. Feed. Use .....	.1	0	.1	0	(s)	0	0	(s)	(s)	.7	.1	0	0	.4	.2	.2	.2
Still Gas for Other Uses	4.4	4.5	4.4	4.0	4.2	3.3	4.2	4.1	2.9	4.6	3.5	3.8	1.9	4.0	3.7	5.2	4.3
Miscellaneous Products	1.2	.8	1.2	.2	.1	.3	.2	.2	.8	.9	1.4	.4	0	1.0	.2	.2	.7
Processing Gain(-) or Loss(+) ⁴	-6.9	-9	-6.4	-3.6	-4.4	-6.0	-4.0	-4.5	-2.7	-6.7	-4.9	-1.8	-1.3	-5.4	-1.2	-5.0	-5.1

¹ Based on crude oil input and net reruns of unfinished oils.

² Based on total finished motor gasoline output plus net output of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and alcohol.

³ Based on finished aviation gasoline output plus net output of aviation gasoline blending components.

⁴ Represents the arithmetic difference between input and production.

(s) Less than 0.05 percent.

Note: Total may not equal sum of components due to independent rounding.

See Explanatory Notes on negative product yields.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 18. Refinery Receipts of Crude Oil by PAD District, December 1982
(Thousands of Barrels)

Method	PAD District I			PAD District II				PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Dist. IV Rocky Mt.	Dist. V West Coast
Pipeline																
Domestic	0	2,115	2,115	1,547	35,988	3,926	20,030	61,491	12,241	46,109	32,097	3,499	2,025	95,971	11,427	28,902
Foreign	0	0	0	152	14,419	3,943	1,111	19,625	966	7,062	5,012	249	0	13,289	1,722	736
Tanker																
Domestic	4,531	0	4,531	0	0	0	0	0	0	4,568	4,489	0	0	9,057	0	25,129
Foreign	22,038	0	22,038	0	803	0	0	803	0	11,714	12,507	0	0	24,221	0	5,877
Barge																
Domestic	0	79	79	0	1,129	0	0	1,129	0	5,188	4,390	30	0	9,608	0	717
Foreign	5,126	0	5,126	0	680	0	0	680	0	45	70	113	0	228	0	0
Tank Cars																
Domestic	77	336	413	0	0	0	0	0	0	0	0	17	0	17	0	30
Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trucks																
Domestic	0	316	316	0	364	34	905	1,303	688	173	459	892	325	2,537	857	1,522
Foreign	0	0	0	0	0	0	0	0	182	0	0	0	0	182	47	0
Total																
Domestic	4,608	2,846	7,454	1,547	37,481	3,960	20,935	63,923	12,929	56,038	41,435	4,438	2,350	117,190	12,284	56,300
Foreign	27,164	0	27,164	152	15,902	3,943	1,111	21,108	1,148	18,821	17,589	362	0	37,920	1,769	6,613

Note: Total may not equal sum of components due to independent rounding.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 19. Fuels Consumed at Refineries by PAD District, December 1982
(Thousands of Barrels, Except Where Noted)

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Dist. V West Coast
Crude Oil (including lease condensate)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Liquefied Petroleum Gases¹	26	(s)	27	3	64	26	19	111	(s)	4	177	0	3	184	5
Unfinished Oils	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Distillate Fuel Oil	35	17	52	0	5	0	3	8	7	0	1	0	(s)	8	0
Residual Fuel Oil	584	73	657	23	407	55	4	489	3	159	113	18	0	293	104
Marketable Petroleum Coke	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Catalyst Petroleum Coke	836	20	856	29	808	69	258	1,164	226	1,412	773	25	10	2,446	156
Still Gas	1,376	129	1,505	69	2,202	261	882	3,414	410	3,509	1,895	181	47	6,042	483
Other Fuels 2	6	0	6	0	84	0	0	84	0	6	0	0	0	6	2
Natural Gas (million cubic feet)	1,831	272	2,103	44	3,080	205	3,316	6,645	3,058	23,573	9,323	840	166	36,960	1,235
Coal (thousand short tons)	0	16	16	0	0	0	0	0	0	0	0	0	0	0	0
Purchased Electricity (million kWh)	209	103	313	15	373	49	634	1,071	76	337	431	23	22	890	170
Purchased Steam (million pounds)	665	9	674	0	100	0	0	100	0	0	639	0	0	639	0
					</										

¹ Includes liquefied refinery gases.

² Includes small quantities of other petroleum products (e.g., unfinished oils, kerosene, etc.) consumed at refineries.

(s) Less than 500 barrels except where noted.

Note: Total may not equal sum of components due to independent rounding.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 20. Imports of Crude Oil and Petroleum Products by PAD District, December 1982
(Thousands of Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) ^{1 2}	23,953	19,643	40,197	1,774	6,071	91,638
Natural Gas Liquids	558	6,273	0	647	673	8,151
Natural Gasoline and Isopentane	1	0	0	0	0	1
Plant Condensate	68	0	0	76	0	144
Liquefied Petroleum Gases and Ethane	489	6,273	0	571	673	8,006
Ethane	304	1,558	0	0	0	1,558
Propane	186	862	0	368	98	1,632
Butane	0	1,222	0	203	575	2,185
Butane-Propane Mixtures	0	0	0	0	0	0
Ethane-Propane Mixtures	0	2,632	0	0	0	2,632
Other Liquids ¹	2,603	388	4,316	0	436	7,742
Unfinished Oils ¹	2,291	253	4,122	0	7	6,672
Motor Gasoline Blending Components	312	134	194	0	429	1,070
Finished Petroleum Products	29,232	446	2,560	9	1,553	33,899
Finished Motor Gasoline	4,597	6	(s)	0	920	5,523
Finished Leaded Motor Gasoline	3,291	4	(s)	0	663	3,957
Finished Unleaded Motor Gasoline	1,307	2	0	0	257	1,566
Finished Aviation Gasoline	(s)	0	0	0	0	(s)
Naphtha-Type Jet Fuel	0	0	0	0	0	0
Kerosene-Type Jet Fuel	225	0	0	0	0	225
Bonded Aircraft Fuel	476	0	0	0	1	477
Other	3,260	1	8	(s)	97	3,366
Kerosene	0	0	0	0	0	0
Distillate Fuel Oil	0	0	0	0	0	0
Bonded ships bunkers	0	0	0	0	0	0
For military offshore use	0	0	0	0	0	0
No. 2 fuel oil	3,257	1	8	(s)	97	3,363
No. 4 fuel oil	3	0	0	0	0	3
Residual Fuel Oil	20,311	305	1,926	9	618	23,170
Bonded ships bunkers	0	0	0	0	0	0
For military offshore use	0	0	0	0	0	0
Other	20,311	305	1,926	9	618	23,170
Naphtha < 400 Deg. for Petro. Feed. Use	2	4	0	0	1	6
Other Oils > 400 Deg. for Petro. Feed. Use	0	0	0	0	0	0
Special Naphthas	62	112	520	(s)	10	704
Lubricants	188	14	53	0	(s)	255
Wax	52	3	49	0	6	110
Asphalt	58	1	0	0	0	59
Miscellaneous Products	(s)	0	3	0	0	3
Total Imports	56,345	26,750	47,072	2,430	8,832	141,430

¹ Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.
² Includes crude oil imported for storage in the Strategic Petroleum Reserve.
(s) Less than 500 barrels.
Note: Total may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.

Table 21. Imports of Crude Oil and Petroleum Products by Source and PAD District, December 1982
(Thousands of Barrels)

Source	Crude Oil 1	LPG and Ethane	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Napthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
All PAD Districts														
Arab OPEC														
Algeria	2,639	0	0	0	0	0	0	0	1,728	0	0	1,728	4,367	141
Kuwait	354	0	182	0	0	0	0	0	0	0	0	182	535	17
Saudi Arabia	7,213	127	0	0	0	0	0	0	0	0	0	127	7,340	237
United Arab Emirates	0	0	0	368	0	0	0	0	0	0	0	368	368	12
Subtotal Arab OPEC	10,206	127	182	368	0	0	0	0	1,728	0	0	2,405	12,611	407
Other OPEC														
Ecuador	0	0	0	0	0	0	0	0	316	0	0	316	316	10
Gabon	1,412	0	0	0	0	0	0	0	0	0	0	0	1,412	46
Indonesia	7,522	0	0	0	152	0	0	39	504	0	0	695	8,217	265
Iran	2,715	0	0	0	0	0	0	0	0	0	0	0	2,715	88
Nigeria	13,520	0	0	0	0	0	0	0	344	0	0	344	13,864	447
Venezuela	6,245	0	1,499	150	0	0	0	0	4,069	340	57	6,115	12,360	399
Subtotal Other OPEC	31,415	0	1,499	150	152	0	0	39	5,233	340	57	7,470	38,884	1,254
Other														
Angola	0	0	0	0	0	0	0	0	389	0	0	389	389	13
Australia	0	26	0	0	0	0	0	0	254	0	0	280	280	9
Bahamas	0	0	1,397	0	0	0	0	232	1,121	0	0	2,750	2,750	89
Brazil	381	0	0	0	259	0	0	0	361	0	0	620	1,001	32
Brunei	217	0	0	0	0	0	0	0	0	0	0	0	217	7
Canada	7,869	7,846	262	240	31	0	9	429	491	184	224	9,717	17,385	561
Congo	0	0	0	0	0	0	0	0	174	0	0	174	174	6
Egypt	518	0	0	312	0	0	0	0	0	0	0	312	831	27
France	0	0	0	0	0	0	0	0	0	8	16	24	24	1
Malaysia	0	0	0	0	0	0	0	0	621	0	0	621	621	20
Mexico	20,889	0	0	0	(s)	0	0	17	0	(s)	7	25	20,913	675
Netherlands	0	0	0	0	1,053	0	0	240	217	22	0	1,532	1,532	49
Netherlands Antilles	0	0	535	0	121	0	0	3	4,689	0	39	5,387	5,387	174
Norway	1,365	0	0	0	0	0	0	0	0	0	0	0	1,365	44
Oman	633	0	0	0	699	0	0	25	35	0	0	759	759	24
People's Republic of China	0	0	0	0	0	0	0	0	784	0	0	784	1,162	37
Peru	378	0	0	0	475	0	0	458	0	0	107	1,484	1,484	48
Puerto Rico	0	0	444	0	0	0	0	0	504	0	3	507	507	16
Spain	0	0	0	0	0	0	0	0	495	0	23	518	3,163	102
Trinidad and Tobago	2,645	0	0	0	0	0	0	0	289	0	26	708	13,567	438
United Kingdom	12,860	7	0	0	386	0	0	0	3,936	139	0	10,411	10,411	336
Virgin Islands	0	0	1,699	0	2,046	225	468	1,900	0	0	0	0	299	10
Zaire	299	0	0	0	0	0	0	0	0	0	0	0	299	10
Other Western Hemisphere	143	0	0	0	0	0	0	0	556	4	0	560	703	23
Other Eastern Hemisphere	2,021	(s)	655	0	300	0	0	24	1,294	6	79	2,359	4,380	141
Subtotal Other	50,017	7,879	4,992	552	5,371	225	477	3,327	16,208	364	522	39,917	89,934	2,901
Total Imports	91,638	8,006	6,672	1,070	5,523	225	477	3,366	23,170	704	579	49,792	141,430	4,562

See footnotes at end of table.

Table 21. Imports of Crude Oil and Petroleum Products by Source and PAD District, December 1982
(Thousands of Barrels)

Source	Crude Oil 1	LPG and Ethane	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
PAD District I														
Arab OPEC														
Algeria	1,060	0	0	0	0	0	0	0	1,728	0	0	1,728	2,788	90
Kuwait	354	0	182	0	0	0	0	0	0	0	0	182	535	17
Saudi Arabia	3,467	127	0	0	0	0	0	0	0	0	0	127	3,595	116
Subtotal Arab OPEC	4,881	127	182	0	0	0	0	0	1,728	0	0	2,037	6,918	223
Other OPEC														
Ecuador	0	0	0	0	0	0	0	0	316	0	0	316	316	10
Gabon	530	0	0	0	0	0	0	0	0	0	0	0	530	17
Indonesia	1,453	0	0	0	0	0	0	0	494	0	0	494	1,947	63
Nigeria	4,951	0	0	0	0	0	0	0	0	0	0	0	4,951	160
Venezuela	1,365	0	260	0	0	0	0	0	3,729	0	57	4,046	5,411	175
Subtotal Other OPEC	8,298	0	260	0	0	0	0	0	4,539	0	57	4,855	13,154	424
Other														
Angola	0	0	0	0	0	0	0	0	389	0	0	389	389	13
Australia	0	0	0	0	0	0	0	0	253	0	0	253	253	8
Bahamas	0	0	562	0	0	0	0	232	1,121	0	0	1,914	1,914	62
Brazil	381	0	0	0	259	0	0	0	361	0	0	620	1,001	32
Canada	0	355	2	0	26	0	8	427	151	62	126	1,157	1,157	37
Congo	0	0	0	0	0	0	0	0	174	0	0	174	174	6
Egypt	0	0	0	312	0	0	0	0	0	0	0	312	312	10
France	0	0	0	0	0	0	0	0	621	0	16	621	621	1
Malaysia	0	0	0	0	0	0	0	0	0	0	0	0	1,825	59
Mexico	1,825	0	0	0	0	0	0	0	217	0	0	1,510	1,510	49
Netherlands	0	0	0	0	1,053	0	0	240	4,475	0	39	5,173	5,173	167
Netherlands Antilles	0	0	535	0	121	0	0	3	0	0	0	0	633	20
Oman	633	0	0	0	0	0	0	0	784	0	0	784	1,162	37
Peru	378	0	0	0	0	0	0	0	0	0	107	1,484	1,484	48
Puerto Rico	0	0	444	0	475	0	0	458	495	0	0	495	989	32
Trinidad and Tobago	495	0	0	0	386	0	0	0	289	0	26	708	7,322	236
United Kingdom	6,614	7	0	0	0	0	0	0	3,936	0	0	8,880	8,880	286
Virgin Islands	0	0	306	0	2,046	225	488	1,900	0	0	0	0	556	18
Other Western Hemisphere	0	0	0	0	0	0	0	0	556	0	0	556	556	18
Other Eastern Hemisphere	448	0	0	0	231	0	0	0	225	0	(s)	456	904	29
Subtotal Other	10,773	362	1,849	312	4,597	225	476	3,260	14,044	62	312	25,500	36,274	1,170
Total Imports	23,953	489	2,291	312	4,597	225	476	3,260	20,311	62	369	32,392	56,345	1,818
PAD District II														
Arab OPEC														
Algeria	1,106	0	0	0	0	0	0	0	0	0	0	0	1,106	36
Saudi Arabia	347	0	0	0	0	0	0	0	0	0	0	0	347	11
Subtotal Arab OPEC	1,453	0	0	0	0	0	0	0	0	0	0	0	1,453	47

See footnotes at end of table.

Table 21. Imports of Crude Oil and Petroleum Products by Source and PAD District, December 1982

(Thousands of Barrels)

Source	Crude Oil 1	LPG and Ethane	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Napthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
PAD District II														
Other OPEC														
Iran	993	0	0	0	0	0	0	0	0	0	0	0	993	32
Nigeria	3,371	0	0	0	0	0	0	0	0	0	0	0	3,371	109
Venezuela	821	0	0	0	0	0	0	0	0	0	0	0	821	26
Subtotal Other OPEC	5,184	0	0	0	0	0	0	0	0	0	0	0	5,184	167
Other														
Canada	5,159	6,273	253	134	6	0	0	1	305	112	22	7,106	12,265	396
Egypt	518	0	0	0	0	0	0	0	0	0	0	0	518	17
France	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Mexico	4,278	0	0	0	0	0	0	0	0	0	0	0	4,278	138
United Kingdom	1,477	0	0	0	0	0	0	0	0	0	(s)	(s)	1,477	48
Other Eastern Hemisphere	1,573	0	0	0	0	0	0	0	0	0	(s)	(s)	1,573	51
Subtotal Other	13,005	6,273	253	134	6	0	0	1	305	112	22	7,106	20,112	649
Total Imports	19,643	6,273	253	134	6	0	0	1	305	112	22	7,106	26,750	863
PAD District III														
Arab OPEC														
Algeria	473	0	0	0	0	0	0	0	0	0	0	0	473	15
Saudi Arabia	3,399	0	0	0	0	0	0	0	0	0	0	0	3,399	110
Subtotal Arab OPEC	3,872	0	0	0	0	0	0	0	0	0	0	0	3,872	125
Other OPEC														
Gabon	882	0	0	0	0	0	0	0	0	0	0	0	882	28
Indonesia	952	0	0	0	0	0	0	0	0	0	0	0	952	31
Iran	1,722	0	0	0	0	0	0	0	0	0	0	0	1,722	56
Nigeria	5,199	0	0	0	0	0	0	0	344	0	0	344	5,542	179
Venezuela	4,060	0	1,239	89	0	0	0	0	340	340	0	2,008	6,068	196
Subtotal Other OPEC	12,814	0	1,239	89	0	0	0	0	684	340	0	2,352	15,166	489
Other														
Australia	0	0	0	0	0	0	0	0	1	0	0	1	1	(s)
Bahamas	0	0	835	0	0	0	0	0	0	0	0	835	835	27
Canada	0	0	0	105	0	0	0	0	0	0	0	105	105	3
France	0	0	0	0	0	0	0	0	0	8	0	8	8	(s)
Mexico	14,785	0	0	0	(s)	0	0	8	0	(s)	1	10	14,795	477
Netherlands	0	0	0	0	0	0	0	0	0	22	0	22	22	1
Norway	1,365	0	0	0	0	0	0	0	0	0	0	0	1,365	44
Spain	0	0	0	0	0	0	0	0	504	0	3	507	507	16
Trinidad and Tobago	2,151	0	0	0	0	0	0	0	0	0	23	23	2,174	70
United Kingdom	4,768	0	0	0	0	0	0	0	0	0	0	0	4,768	154
Virgin Islands	0	0	1,392	0	0	0	0	0	0	139	0	1,531	1,531	49
Zaire	299	0	0	0	0	0	0	0	0	0	0	0	299	10
Other Western Hemisphere	143	0	0	0	0	0	0	0	0	4	0	4	147	5
Other Eastern Hemisphere	0	0	655	0	0	0	0	0	737	6	78	1,477	1,477	48
Subtotal Other	23,511	0	2,882	105	(s)	0	0	8	1,243	180	105	4,523	28,034	904

See footnotes at end of table.

Table 21. Imports of Crude Oil and Petroleum Products by Source and PAD District, December 1982

(continued)														
Source	Crude Oil 1	LPG and Ethane	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
PAD District III														
Other														
Total Imports	40,197	0	4,122	194	(s)	0	0	8	1,926	520	105	6,875	47,072	1,518
PAD District IV														
Other														
Canada	1,774	571	0	0	0	0	0	(s)	9	(s)	76	656	2,430	78
Subtotal Other	1,774	571	0	0	0	0	0	(s)	9	(s)	76	656	2,430	78
Total Imports	1,774	571	0	0	0	0	0	(s)	9	(s)	76	656	2,430	78
PAD District V														
Arab OPEC														
United Arab Emirates	0	0	0	368	0	0	0	0	0	0	0	368	368	12
Subtotal Arab OPEC	0	0	0	368	0	0	0	0	0	0	0	368	368	12
Other OPEC														
Indonesia	5,117	0	0	0	152	0	0	39	10	0	0	201	5,319	172
Venezuela	0	0	0	61	0	0	0	0	0	0	0	61	61	2
Subtotal Other OPEC	5,117	0	0	61	152	0	0	39	10	0	0	262	5,380	174
Other														
Australia	0	26	0	0	0	0	0	0	0	0	0	26	26	1
Brunei	217	0	0	0	0	0	0	0	0	0	0	0	217	7
Canada	736	647	7	0	0	0	1	(s)	26	10	1	692	1,428	46
Mexico	0	0	0	0	0	0	0	9	0	0	6	15	15	(s)
Netherlands Antilles	0	0	0	0	0	0	0	0	214	0	0	214	214	7
People's Republic of China	0	0	0	0	0	0	0	0	35	0	0	759	759	24
United Kingdom	0	0	0	0	699	0	0	25	0	0	(s)	(s)	(s)	(s)
Other Eastern Hemisphere	0	(s)	0	0	69	0	0	24	333	0	(s)	426	426	14
Subtotal Other	953	673	7	0	768	0	1	58	608	10	7	2,131	3,084	99
Total Imports	6,071	673	7	429	920	0	1	97	618	10	7	2,762	8,832	285

1 Includes crude oil imported for storage in the Strategic Petroleum Reserve.
 2 Includes aviation gasoline, waxes, asphalt, lubricants, natural gasoline, isopentane, plant condensate, naphthas less than 400 degrees F, other oils greater than 400 degrees F and miscellaneous products.
 (s) Less than 500 barrels or less than 500 barrels per day.
 Note: Total may not equal sum of components due to independent rounding.
 Sources: See Explanatory Notes on Data Collection and Estimation.

Table 22. Exports of Crude Oil and Petroleum Products by PAD District, December 1982
(Thousands of Barrels)

Commodity	Petroleum Administration for Defense Districts					Total
	I	II	III	IV	V	
Crude Oil (including lease condensate) ¹	0	36	0	0	5,934	5,970
Liquefied Petroleum Gases and Ethane	53	360	1,167	(*)	160	1,740
Ethane	0	0	(*)	0	0	(*)
Propane	23	142	836	(*)	64	1,065
Butane	30	218	331	(*)	96	675
Butane-Propane Mixtures	0	0	0	0	0	0
Finished Motor Gasoline	1	1	191	0	15	208
Naphtha-Type Jet Fuel	0	0	0	0	1	1
Kerosene-Type Jet Fuel	293	0	373	0	26	692
Kerosene	(*)	0	0	0	(*)	1
Distillate Fuel Oil	779	0	3,162	0	495	4,436
Residual Fuel Oil	(*)	0	3,188	0	2,584	5,771
Naphtha < 400 Deg. for Petrochem. Feedstock	41	5	135	(*)	5	187
Other Oils > 400 Deg. for Petrochem. Feedstock	3	2	652	0	1	670
Special Naphthas	68	11	18	(*)	1	24
Lubricants	5	(*)	295	(*)	63	438
Wax	80	302	10	0	6	21
Petroleum Coke	154	1	2,653	(*)	3,273	6,306
Asphalt	12	1	1	1	1	159
Miscellaneous Products	1,490	699	16	(*)	3	32
Total Product Exports			11,862	3	6,634	20,687
Total Exports	1,490	735	11,862	3	12,568	26,657

¹ Exports of crude oil are prohibited under normal circumstances. Some crude oil is shipped to Canada in exchange on a barrel-for-barrel basis. Shipments of crude oil to Puerto Rico and the Virgin Islands are not prohibited because these territories are U.S. possessions.

(*) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 23. Exports of Crude Oil and Petroleum Products by Destination, December 1982
(Thousands of Barrels)

Destination	Crude Oil 1	LPG and Ethane	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubricants	Wax	Petroleum Coke	Asphalt	Other	Total	Total (Daily Average)
Argentina	0	1	0	0	0	0	(s)	(s)	(s)	50	(s)	2	53	2
Australia	0	1	0	0	0	0	(s)	3	(s)	55	(s)	3	61	2
Bahamas	0	5	1	0	0	100	(s)	0	0	0	0	0	108	3
Bahrain	0	1	0	0	0	0	(s)	0	0	0	0	0	1	(s)
Belgium & Luxembourg	0	40	0	0	99	0	(s)	1	(s)	845	(s)	1	985	32
Brazil	0	140	0	0	0	0	(s)	0	0	0	0	0	141	5
Cameroon	0	(s)	0	0	0	0	(s)	34	0	0	0	0	(s)	(s)
Canada	36	366	1	0	0	648	3	0	1	437	4	36	1,565	50
Chile	0	0	0	0	0	0	0	3	0	0	0	1	145	(s)
China (Taiwan)	0	(s)	0	0	0	0	0	21	(s)	123	0	0	12	(s)
Colombia	0	0	0	0	0	0	0	10	(s)	(s)	0	0	4	(s)
Costa Rica	0	(s)	0	0	0	0	(s)	4	(s)	0	0	0	(s)	(s)
Denmark	0	0	0	0	0	0	(s)	(s)	(s)	0	0	0	12	(s)
Dominican Republic	0	11	0	0	0	0	(s)	7	1	0	0	1	9	(s)
Ecuador	0	0	0	0	0	0	(s)	1	0	0	0	0	1	(s)
Egypt	0	0	0	0	0	0	(s)	9	0	0	0	0	9	(s)
El Salvador	0	(s)	0	0	0	0	(s)	0	0	0	0	0	0	(s)
Finland	0	0	0	0	(s)	0	(s)	1	2	716	(s)	161	1,115	36
France	0	53	0	0	184	0	(s)	0	0	0	0	0	55	2
French Pacific Isl.	0	0	0	0	33	22	(s)	(s)	0	0	0	0	31	1
Ghana	0	0	0	0	0	0	(s)	(s)	0	31	0	0	911	29
Greece	0	1	0	0	833	0	(s)	5	3	76	0	0	9	(s)
Guatemala	0	0	0	0	0	0	(s)	0	0	0	0	0	0	(s)
Guinea	0	(s)	0	0	0	0	(s)	8	0	0	0	0	8	(s)
Honduras	0	0	0	0	0	0	(s)	1	(s)	0	0	0	3	(s)
Hong Kong	0	1	0	0	0	0	(s)	0	0	27	0	1	28	1
India	0	0	0	0	0	0	(s)	25	(s)	0	0	0	25	1
Indonesia	0	0	0	0	0	0	(s)	0	(s)	0	0	0	0	0
Iran	0	0	0	0	0	0	(s)	0	(s)	0	0	0	0	(s)
Israel	0	1	0	0	0	0	(s)	1	(s)	230	0	248	1,386	45
Italy	0	358	0	0	224	326	(s)	5	(s)	1	0	4	36	1
Ivory Coast	0	10	0	0	0	0	(s)	22	(s)	0	0	0	1,699	55
Jamaica	0	20	0	0	0	310	(s)	4	2	1,211	(s)	54	1	1
Japan	0	0	(s)	0	86	0	(s)	0	0	0	0	0	1	1
Jordan	0	0	0	0	0	0	(s)	3	(s)	28	0	2	1,372	44
Korea, Republic of	0	(s)	0	0	294	1,044	0	2	(s)	0	152	(s)	155	5
Kuwait	0	0	0	0	0	0	0	2	(s)	0	0	0	2	(s)
Lebanon	0	0	0	0	0	0	0	0	(s)	0	0	0	(s)	(s)
Liberia	0	0	0	0	0	0	0	1	(s)	0	0	0	1	(s)
Malaysia	0	0	0	0	0	0	0	16	0	37	0	3	1,103	36
Mexico	635	0	206	27	172	0	5	8	(s)	1,049	(s)	24	3,803	123
Netherlands	0	66	0	223	1,026	1,401	0	(s)	(s)	0	0	0	1	(s)
Netherlands Antilles	0	0	0	0	0	0	0	0	(s)	0	0	0	1	(s)
New Zealand	0	0	0	0	0	0	0	20	0	0	0	0	21	1
Nicaragua	0	0	0	0	0	0	0	43	0	0	0	0	169	5
Nigeria	0	0	0	0	0	0	0	(s)	(s)	55	0	0	56	2
Norway	0	0	0	0	0	0	0	19	0	0	0	0	(s)	(s)
Pacific Trust Terr.	0	0	0	0	0	0	0	3	(s)	1	0	1	21	1
Panama	0	0	0	0	0	0	(s)	0	0	0	0	0	3	(s)
Peru	0	0	0	0	0	0	0	8	1	(s)	0	0	12	(s)
Philippines	0	0	0	0	0	0	0	0	0	0	0	2	0	(s)

See footnotes at end of table.

Table 23. Exports of Crude Oil and Petroleum Products by Destination, December 1982
(Thousands of Barrels)

Destination	Crude Oil ¹	LPG and Ethane	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubricants	Wax	Petroleum Coke	Asphalt	Other	Total	Total (Daily Average)
Puerto Rico	1,931	16	(s)	0	0	382	1	12	1	0	0	8	2,351	76
Rep. of South Africa	0	0	0	0	0	0	0	5	(s)	0	(s)	148	152	5
Saudi Arabia	0	3	0	0	0	0	(s)	20	0	0	(s)	3	26	1
Singapore	0	1	0	0	0	470	0	6	(s)	0	(s)	2	478	15
Spain	0	0	0	0	0	0	0	1	(s)	760	0	1	762	25
Surinam	0	0	0	0	0	0	0	(s)	0	10	0	(s)	10	(s)
Sweden	0	0	0	0	489	0	0	1	(s)	0	0	(s)	470	15
Switzerland	0	0	0	0	453	0	0	1	(s)	0	0	(s)	454	15
Thailand	0	1	0	0	0	0	(s)	1	0	0	(s)	1	2	(s)
Trinidad and Tobago	0	(s)	0	0	0	0	0	1	0	0	(s)	1	2	(s)
Turkey	0	0	0	0	0	0	(s)	(s)	(s)	193	0	22	216	7
United Arab Emirates	0	(s)	0	0	0	0	(s)	(s)	0	0	0	1	2	(s)
United Kingdom	0	1	0	150	224	331	0	10	(s)	62	(s)	14	792	26
U.S.S.R.	0	0	0	0	0	0	0	81	0	222	0	13	316	10
Uruguay	0	0	0	0	0	0	0	(s)	(s)	0	0	(s)	1	(s)
Venezuela	0	2	0	0	0	0	(s)	(s)	(s)	47	(s)	2	51	2
Virgin Islands	3,456	(s)	0	0	0	738	0	0	0	0	0	(s)	4,194	135
West Germany	0	0	0	0	206	0	0	1	(s)	0	0	105	312	10
Yugoslavia	0	0	0	0	0	0	0	(s)	0	45	0	0	45	1
Other	547	5	0	167	132	0	(s)	4	(s)	0	(s)	19	875	28
Total	5,970	1,740	208	693	4,436	5,771	24	438	21	6,308	159	889	26,657	860

¹ Exports of crude oil are prohibited under normal circumstances. Some crude oil is shipped to Canada in exchange, on a barrel-for-barrel basis. Shipments of crude oil to Puerto Rico and the Virgin Islands are not prohibited because these territories are U.S. possessions.

(s) Less than 500 barrels or less than 500 barrels per day.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, December 31, 1982
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III					PAD			United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Dist. IV Rocky Mt.	Dist. V West Coast		
Crude Oil (incl. lease condensate) ¹																		
Refinery	—	—	15,182	—	—	—	—	15,911	—	—	—	—	—	—	41,525	1,733	25,310	98,661
Tank Farms and Pipelines	—	—	2,265	—	—	—	—	60,989	—	—	—	—	—	—	99,054	10,263	30,819	203,390
Leases	—	—	65	—	—	—	—	1,569	—	—	—	—	—	—	17,186	1,440	1,782	22,042
Strategic Petroleum Reserve ²	—	—	—	—	—	—	—	0	—	—	—	—	—	—	283,827	0	0	283,827
Alaskan In-Transit	—	—	—	—	—	—	—	0	—	—	—	—	—	—	0	0	22,643	22,643
Total	—	—	17,512	—	—	—	—	78,469	—	—	—	—	—	—	451,592	13,436	80,554	641,563
Petroleum Products																		
Refinery	42,866	3,622	48,488	886	42,571	6,293	20,032	69,782	10,287	71,175	47,632	5,371	1,441	135,906	14,515	65,365	332,056	
Bulk Terminal	141,110	8,542	149,652	3,979	40,556	8,785	11,991	85,311	4,766	30,064	8,130	3,533	544	47,037	2,958	19,821	284,779	
Pipeline	26,456	2,715	29,171	1,294	12,436	3,952	18,219	35,901	7,444	8,903	7,451	15,293	1,053	40,144	2,813	4,301	112,330	
Natural Gas Processing Plant	429	572	1,001	0	2,441	120	16,189	18,750	5,488	18,363	9,279	3,618	690	37,437	311	700	58,199	
Total	210,861	15,451	226,312	6,159	98,004	19,150	66,431	189,744	27,985	128,505	72,492	27,815	3,728	260,524	20,597	90,187	787,364	
Natural Gasoline and isopentane																		
Refinery	2	0	2	0	28	135	105	268	37	89	173	1	24	324	8	28	630	
Pipeline	0	0	0	0	129	17	268	414	211	37	0	81	81	410	182	5	1,011	
Natural Gas Processing Plant	2	24	25	0	26	16	1,614	1,656	332	1,742	474	33	40	2,622	40	22	4,366	
Total	4	24	27	0	183	168	1,987	2,338	580	1,868	847	115	145	3,356	230	55	6,007	
Unfractionated Stream																		
Pipeline	0	0	0	0	78	0	16	94	0	28	28	0	0	56	0	0	150	
Natural Gas Processing Plant	0	0	0	0	102	2	2,114	2,218	223	724	56	1	167	1,172	32	1	3,423	
Total	0	0	0	0	180	2	2,130	2,312	223	752	84	1	167	1,228	32	1	3,573	
Plant Condensate																		
Refinery	0	0	0	0	5	0	0	5	12	86	0	82	0	180	0	0	185	
Pipeline	0	0	0	0	0	0	0	0	814	269	49	4	17	1,153	0	0	1,153	
Natural Gas Processing Plant	0	0	0	0	2	0	5	7	42	37	3	9	1	91	10	0	108	
Total	0	0	0	0	7	0	5	12	868	392	52	95	18	1,424	10	0	1,446	
Ethane																		
Refinery	0	0	0	0	8	0	0	8	0	377	0	0	0	377	0	0	385	
Bulk Terminal	0	0	0	0	50	0	42	92	0	289	0	0	0	289	0	0	381	
Pipeline	0	0	0	0	43	940	152	1,135	187	79	107	0	3	356	0	0	1,491	
Natural Gas Processing Plant	0	0	0	0	25	0	850	874	388	1,390	302	(9)	0	2,080	1	0	2,955	
Total	0	0	0	0	126	940	1,044	2,109	555	2,135	409	(9)	3	3,102	1	0	5,212	
Propane for Petrochemical Feedstock Use																		
Refinery	55	0	55	0	90	0	2	92	0	5	417	0	0	422	0	0	569	
Total	55	0	55	0	90	0	2	92	0	5	417	0	0	422	0	0	569	
Propane for Other Uses																		
Refinery	650	8	658	4	1,191	39	302	1,536	77	689	1,005	3	5	1,779	162	235	4,370	
Bulk Terminal	606	0	606	0	1,083	82	300	1,465	134	10,610	126	32	0	10,902	31	0	13,004	
Pipeline	893	1,513	2,406	3	1,428	254	1,948	3,633	472	408	249	518	152	1,799	121	0	7,959	
Natural Gas Processing Plant	395	540	935	0	2,189	91	8,179	10,459	2,693	4,999	5,462	3,470	210	16,833	146	238	28,610	
Total	2,544	2,061	4,605	7	5,891	466	10,729	17,093	3,376	16,706	6,842	4,023	367	31,313	460	473	53,943	

See footnotes at end of table.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, December 31, 1982
(Thousands of Barrels) (continued)

Commodity	PAD District I				PAD District II				PAD District III				PAD District IV		United States		
	East Coast	Appala- chian #1	Total	Appala- chian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Dist. IV Rocky Mt.	Dist. V West Coast
Butane for Petro. Feed. Use																	
Refinery	0	0	0	0	0	17	0	17	0	22	0	2	0	24	0	2	43
Total	0	0	0	0	0	17	0	17	0	22	0	2	0	24	0	2	43
Butane for Other Uses																	
Refinery	182	0	182	162	208	53	194	617	74	379	543	4	4	1,004	155	601	2,559
Bulk Terminal	236	0	236	0	206	0	73	279	95	2,230	0	0	0	2,325	0	0	2,840
Pipeline	33	65	98	58	724	15	326	1,123	875	19	5	140	77	1,116	144	0	2,481
Natural Gas Processing Plant	17	7	23	0	58	9	871	938	863	3,233	1,894	62	90	6,142	40	358	7,502
Total	468	72	539	220	1,196	77	1,464	2,957	1,907	5,861	2,442	206	171	10,587	339	959	15,382
Butane-Propane Mixtures for Petro. Feed. Use																	
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Butane-Propane Mixtures for Other Uses																	
Refinery	0	0	0	0	0	0	0	0	1	10	11	0	7	29	14	174	217
Bulk Terminal	0	0	0	0	130	0	0	130	0	0	0	0	0	0	0	0	130
Pipeline	0	0	0	0	0	0	20	20	604	796	14	0	1	1,415	0	0	1,435
Natural Gas Processing Plant	0	0	0	0	11	0	36	47	56	2	(s)	1	0	59	0	5	111
Total	0	0	0	0	141	0	56	197	661	808	25	1	8	1,503	14	179	1,893
Ethane-Propane Mixtures																	
Bulk Terminal	0	0	0	0	3	0	7	10	116	2,408	0	0	0	2,524	0	0	2,534
Pipeline	0	0	0	0	66	0	457	523	398	60	2	0	114	574	122	0	1,219
Natural Gas Processing Plant	0	0	0	0	0	0	1,288	1,288	318	4,305	0	0	109	4,733	0	0	6,021
Total	0	0	0	0	69	0	1,752	1,821	832	6,773	2	0	223	7,831	122	0	9,774
Isobutane																	
Refinery	0	8	8	33	124	25	164	346	100	133	432	13	7	685	22	26	1,087
Bulk Terminal	0	0	0	0	53	0	92	145	98	1,375	0	0	0	1,473	0	0	1,618
Pipeline	15	0	15	0	315	0	76	391	159	11	0	150	48	368	36	0	810
Natural Gas Processing Plant	1	2	2	0	23	2	1,233	1,258	321	1,928	1,086	39	71	3,445	1	76	4,782
Total	16	10	25	33	515	27	1,565	2,140	678	3,447	1,518	202	126	5,971	59	102	8,297
Other Hydrocarbons and Alcohol																	
Refinery	83	26	109	0	70	0	0	70	1	86	40	0	0	127	0	5	311
Total	83	26	109	0	70	0	0	70	1	86	40	0	0	127	0	5	311
Unfinished Oils																	
Refinery	3,265	315	3,580	43	2,570	122	1,139	3,874	791	6,228	4,266	141	95	11,521	439	4,689	24,103
Naphthalene and Lighter	1,896	9	1,905	0	2,058	8	752	2,818	416	6,083	1,343	36	5	7,883	334	3,794	16,734
Kerosene and Lighter Gas Oils	5,794	357	6,151	87	4,708	325	1,802	6,922	848	11,502	6,278	673	138	19,439	818	11,229	44,559
Heavy Gas Oils	1,711	309	2,020	4	2,898	21	1,247	4,170	542	3,560	3,219	45	0	7,366	1,095	5,230	19,881
Residuum	12,666	990	13,656	134	12,234	476	4,940	17,784	2,597	27,373	15,106	895	238	46,209	2,686	24,942	105,277
Total																	

See footnotes at end of table.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, December 31, 1982
(Thousands of Barrels) (continued)

Commodity	PAD District I				PAD District II				PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Rocky Mt.	Dist. V West Coast
Kerosene-Type Jet Fuel																	
Refinery	1,191	0	1,191	43	1,172	104	202	1,521	305	1,813	2,252	17	23	4,410	379	3,019	10,520
Bulk Terminal	4,414	178	4,592	59	2,563	236	543	3,401	228	1,072	83	44	37	1,464	150	1,615	11,222
Pipeline	3,164	110	3,274	84	557	211	1,490	2,342	418	787	732	1,113	37	3,087	109	622	9,434
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	(s)	0	(s)	0	0	(s)
Total	8,769	288	9,057	186	4,292	551	2,235	7,264	951	3,672	3,067	1,174	97	8,961	638	5,256	31,176
Kerosene																	
Refinery	307	90	397	0	592	44	223	859	52	840	449	8	54	1,403	13	97	2,769
Bulk Terminal	3,815	403	4,218	230	1,272	70	21	1,593	14	332	36	24	0	406	29	48	6,294
Pipeline	590	2	592	26	129	0	39	194	31	70	300	175	0	576	0	1	1,363
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	1	0	0	0	(s)	2	0	0	2
Total	4,712	495	5,207	256	1,993	114	283	2,646	98	1,242	785	207	54	2,387	42	146	10,428
Total Distillate Fuel Oils																	
Refinery	8,086	505	8,591	53	7,579	2,119	4,670	14,421	1,381	8,356	5,192	1,311	353	16,593	2,463	5,981	48,049
Bulk Terminal	61,306	3,232	64,538	1,379	13,725	3,430	4,425	22,959	1,308	4,500	1,622	1,093	163	8,686	860	5,642	102,685
Pipeline	7,152	307	7,459	473	2,853	1,095	5,209	9,630	687	1,940	1,585	4,637	114	8,963	701	1,106	27,859
Natural Gas Processing Plant	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0	0	2
Total Distillate Fuel Oil	76,544	4,044	80,588	1,905	24,157	6,644	14,305	47,011	3,377	14,796	8,399	7,041	630	34,243	4,024	12,729	178,595
Dist. Fuel Oils Less No. 4 Fuel Oil																	
Refinery	8,086	498	8,584	53	7,542	2,119	4,670	14,384	1,344	8,120	5,044	1,230	295	16,033	2,455	5,923	47,379
Bulk Terminal	59,901	3,232	63,133	1,371	13,662	3,430	4,425	22,888	1,294	4,500	1,555	1,093	163	8,605	860	5,605	101,091
Pipeline	7,152	307	7,459	473	2,853	1,095	5,209	9,630	687	1,940	1,585	4,637	114	8,963	701	1,106	27,859
Natural Gas Processing Plant	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0	0	2
Total	75,139	4,037	79,176	1,897	24,057	6,644	14,305	46,903	3,326	14,560	8,184	6,960	572	33,602	4,016	12,634	176,331
No. 4 Fuel Oil																	
Refinery	0	7	7	0	37	0	0	37	37	236	148	81	58	560	8	58	670
Bulk Terminal	1,405	0	1,405	8	63	0	0	71	14	0	67	0	0	81	0	37	1,594
Total	1,405	7	1,412	8	100	0	0	108	51	236	215	81	58	641	8	95	2,264
Residual Fuel Oils																	
Refinery	4,463	137	4,600	111	2,500	379	159	3,149	317	5,150	4,460	279	40	10,246	634	7,620	26,249
Bulk Terminal	29,557	577	30,134	153	1,107	170	643	2,073	201	1,616	4,169	41	0	6,027	0	1,674	39,908
Pipeline	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	17	18
Total	34,020	714	34,734	264	3,607	549	802	5,222	518	6,767	8,629	320	40	16,274	634	9,311	66,175
Naphtha < 400 Deg. Petro. Feedstock																	
Refinery	102	0	102	0	97	0	85	182	108	969	330	9	0	1,416	0	267	1,967
Total	102	0	102	0	97	0	85	182	108	969	330	9	0	1,416	0	267	1,967
Other Oils > 400 Deg. Petro. Feedstock																	
Refinery	5	0	5	0	185	0	1	186	343	832	224	42	0	1,441	0	548	2,180
Total	5	0	5	0	185	0	1	186	343	832	224	42	0	1,441	0	548	2,180

See footnotes at end of table.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, December 31, 1982
(Thousands of Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La., Gulf Coast	No. La., Ark.	New Mexico	Total			
Special Naphthas																	
Refinery	28	42	70	0	210	0	165	375	38	1,284	56	139	0	1,517	9	231	2,202
Bulk Terminal	750	73	823	46	204	5	0	255	0	2	0	21	0	23	0	34	1,135
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	137	0	0	0	0	137	0	0	137
Total	778	115	893	46	414	5	165	630	175	1,286	56	160	0	1,677	9	265	3,474
Lubricants																	
Refinery	88	457	545	0	44	0	49	93	0	297	56	0	0	353	4	39	1,034
Bright Stock	469	486	955	0	567	0	534	1,101	0	1,852	1,002	84	0	2,938	68	572	5,634
Neutral	623	147	770	0	146	0	136	282	47	1,738	281	201	0	2,267	9	110	3,438
Other	821	188	1,009	83	434	18	77	612	12	17	210	60	0	299	3	502	2,425
Bulk Terminals	2,001	1,278	3,279	83	1,191	18	796	2,088	59	3,904	1,549	345	0	5,857	84	1,223	12,531
Total																	
Wax, Microcrystalline																	
Refinery	4	28	32	0	0	0	12	12	26	25	11	0	0	62	0	0	106
Total	4	28	32	0	0	0	12	12	26	25	11	0	0	62	0	0	106
Wax, Crystalline—Fully Refined																	
Refinery	16	66	82	0	18	0	38	56	0	93	183	0	0	276	10	41	465
Total	16	66	82	0	18	0	38	56	0	93	183	0	0	276	10	41	465
Wax, Crystalline—Other																	
Refinery	6	74	80	0	0	0	11	11	0	108	0	0	0	108	0	16	215
Total	6	74	80	0	0	0	11	11	0	108	0	0	0	108	0	16	215
Petroleum Coke																	
Refinery	801	0	801	0	816	132	1,026	1,974	1	137	523	268	0	929	776	2,241	6,721
Total	801	0	801	0	816	132	1,026	1,974	1	137	523	268	0	929	776	2,241	6,721
Asphalt																	
Refinery	1,474	38	1,512	206	2,148	731	971	4,056	635	573	976	679	157	3,020	1,451	1,289	11,328
Bulk Terminal	1,706	401	2,107	124	1,137	686	130	2,077	0	0	225	72	0	297	0	75	4,556
Total	3,180	439	3,619	330	3,285	1,417	1,101	6,133	635	573	1,201	751	157	3,317	1,451	1,364	15,884
Road Oil																	
Refinery	0	0	0	0	15	0	0	15	0	0	0	0	0	0	0	32	47
Total	0	0	0	0	15	0	0	15	0	0	0	0	0	0	0	32	47
Miscellaneous Products																	
Refinery	310	52	362	1	64	12	15	92	49	436	359	50	0	894	0	186	1,534
Bulk Terminal	19	0	19	0	14	2	3	19	0	0	11	13	0	24	0	125	167
Pipeline	0	0	0	0	0	0	15	15	41	2	0	0	0	43	0	0	58
Natural Gas Processing Plant	0	0	0	0	4	0	(s)	4	40	4	1	2	(s)	48	1	0	53
Total	329	52	381	1	82	14	33	130	130	442	371	65	(s)	1,009	1	311	1,832
Total Stocks, All Oils	—	—	243,824	—	—	—	—	268,213	—	—	—	—	—	712,116	34,033	170,741	1,428,927

1 Crude oil data are not collected by refinery district.

2 Includes 33849 thousands of barrels of domestic crude oil.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

— Not Applicable.

Table 25. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, December 1982
(Thousands of Barrels)

Commodity	From I to			From II to					From III to				From IV to			From V to		
	II	III	V	I	III	IV	V	I	II	IV	V	II	III	V	I	II	III	
Crude Oil	43	0	0	0	0	0	0	423	1,271	0	0	0	0	0	2,750	0	14,071	
Petroleum Products	8,433	436	0	2,705	5,517	2,568	0	86,534	27,511	0	2,902	1,200	69	1,300	316	0	40	
Natural Gasoline and Isopentane	0	0	0	0	326	0	0	0	1,078	0	0	342	12	0	0	0	0	
Unfractionated Stream	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Plant Condensate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Liquefied Petroleum Gases	0	25	0	471	1,938	198	0	2,108	7,147	0	0	77	57	0	0	0	0	
Unfinished Oils	28	208	0	0	0	0	0	742	45	0	346	0	0	0	0	0	0	
Motor Gasoline Blending Components	0	0	0	0	0	0	0	0	914	0	0	0	0	0	0	0	0	
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Finished Motor Gasoline	5,755	0	0	1,556	2,032	1,471	0	47,214	10,790	0	914	487	0	816	0	0	0	
Finished Leaded Motor Gasoline	3,133	0	0	630	1,099	723	0	20,335	4,903	0	521	334	0	550	0	0	0	
Finished Unleaded Motor Gasoline	2,622	0	0	926	933	748	0	26,879	5,887	0	393	153	0	266	0	0	0	
Gasohol	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Finished Aviation Gasoline	0	0	0	0	0	23	0	151	95	0	0	0	0	0	0	0	0	
Naphtha-Type Jet Fuel	153	0	0	0	132	0	0	663	0	0	231	75	0	95	0	0	0	
Kerosene-Type Jet Fuel	358	0	0	100	90	719	0	8,344	2,114	0	216	8	0	55	0	0	0	
Kerosene	73	0	0	2	0	0	0	1,233	99	0	0	0	0	0	0	0	0	
Distillate Fuel Oil	1,984	50	0	233	548	157	0	21,777	4,402	0	394	211	0	334	0	0	0	
Distillate Fuel Oil Less No. 4	1,984	40	0	233	548	157	0	21,639	4,402	0	394	211	0	334	0	0	0	
No. 4 Fuel Oil	0	10	0	0	0	0	0	138	0	0	0	0	0	0	0	0	0	
Residual Fuel Oil	0	108	0	63	394	0	0	2,606	155	0	693	0	0	0	316	0	0	
Naphtha and Other Oils for Petro.																		
Feedstock	18	0	0	28	36	0	0	79	22	0	0	0	0	0	0	0	0	
Special Naphthas	0	0	0	15	0	0	0	248	102	0	0	0	0	0	0	0	0	
Lubricants	27	37	0	62	21	0	0	554	147	0	108	0	0	0	0	0	20	
Wax	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	
Asphalt and Road Oil	0	0	0	0	0	0	0	192	341	0	0	0	0	0	0	0	0	
Miscellaneous Products	37	8	0	175	0	0	0	616	60	0	0	0	0	0	0	0	20	
Total All Products	8,476	436	0	2,705	5,517	2,568	0	86,957	28,782	0	2,902	1,200	69	1,300	3,066	0	14,111	

Note: Total may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.

Table 26. Movements of Petroleum Products by Pipeline Between PAD Districts, December 1982
(Thousands of Barrels)

Commodity	From I to		From II to			From III to			From IV to		
	II	I	III	IV	I	II	IV	V	II	III	V
Natural Gasoline and Isopentane	0	0	326	0	0	1,078	0	0	342	12	0
Unfractionated Stream	0	0	0	0	0	0	0	0	0	0	0
Plant Condensate	0	0	0	0	0	0	0	0	0	0	0
Liquefied Petroleum Gases	0	471	1,938	198	1,925	7,147	0	0	77	57	0
Motor Gasoline Blending Components	0	0	0	0	0	914	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	4,226	1,365	2,032	1,471	37,416	10,026	0	914	487	0	816
Finished Leaded Motor Gasoline	2,364	558	1,099	723	16,289	4,548	0	521	334	0	550
Finished Unleaded Motor Gasoline	1,862	807	933	748	21,127	5,478	0	393	153	0	266
Gasohol	0	0	0	0	0	0	0	0	0	0	0
Finished Aviation Gasoline	0	0	0	23	17	89	0	0	0	0	0
Naphtha-Type Jet Fuel	0	0	132	0	194	0	0	231	75	0	95
Kerosene-Type Jet Fuel	213	93	90	719	5,795	1,851	0	216	8	0	55
Kerosene	43	0	0	0	887	99	0	0	0	0	0
Distillate Fuel Oil	1,318	199	530	157	18,289	4,070	0	394	211	0	334
Distillate Fuel Oil Less No. 4	1,318	199	530	157	18,289	4,070	0	394	211	0	334
No. 4 Fuel Oil	0	0	0	0	0	0	0	0	0	0	0
Residual Fuel Oil	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Products	0	175	0	0	0	29	0	0	0	0	0
Total	5,800	2,303	5,048	2,568	64,523	25,303	0	1,755	1,200	69	1,300

Note: Total may not equal sum of components due to independent rounding.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 27. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, December 1982
(Thousands of Barrels)

Commodity	From I to			From II to			From III to				From V to			
	II	III	V	I	III	V	I	New Eng	Cent Atl	Low Atl	V	I	II	III
Crude Oil	43	0	0	0	0	0	423	0	423	0	1,271	0	2,750	0 14,071
Petroleum Products	2,633	436	0	402	469	0	22,011	2,673	5,148	14,190	1,147	316	0	40
Liquefied Petroleum Gases	0	25	0	0	0	0	183	0	0	183	0	0	0	0
Unfinished Oils	28	208	0	0	0	0	742	57	685	0	45	0	0	0
Finished Motor Gasoline	1,529	0	0	191	0	0	9,798	746	453	8,599	764	0	0	0
Finished Aviation Gasoline	0	0	0	0	0	0	134	19	54	61	6	0	0	0
Naphtha-Type Jet Fuel	153	0	0	0	0	0	469	11	134	324	0	0	0	0
Kerosene-Type Jet Fuel	145	0	0	7	0	0	2,549	220	412	1,917	263	0	0	0
Kerosene	30	0	0	0	0	0	346	0	216	130	0	0	0	0
Distillate Fuel Oil	666	50	0	34	18	0	3,488	698	1,032	1,758	332	0	0	0
Residual Fuel Oil	0	108	0	63	394	0	2,606	875	981	750	155	693	316	0
Naphtha and Other Oils for Petro. Feed. Use	18	0	0	28	36	0	79	0	50	29	22	0	0	0
Special Naphthas	0	0	0	15	0	0	248	30	161	57	102	0	0	0
Lubricants	27	37	0	62	21	0	554	7	372	175	147	108	0	20
Wax	0	0	0	0	0	0	7	0	7	0	0	0	0	0
Asphalt and Road Oil	0	0	0	0	0	0	192	0	0	192	341	0	0	0
Miscellaneous Products	37	8	0	0	0	0	616	10	591	15	31	0	0	20
Total	2,676	436	0	402	469	0	22,434	2,673	5,571	14,190	1,147	3,066	0	14,111

Note: Total may not equal sum of components due to independent rounding.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 28. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker and Barge Between PAD Districts, December 1982
(Thousands of Barrels)

Commodity	P.A.D. District I			P.A.D. District II			P.A.D. District III			P.A.D. District IV			P.A.D. District V		
	Receipts into PADD I	Shipments from PADD I	Net Receipts PADD I	Receipts into PADD II	Shipments from PADD II	Net Receipts PADD II	Receipts into PADD III	Shipments from PADD III	Net Receipts PADD III	Receipts into PADD IV	Shipments from PADD IV	Net Receipts PADD IV	Receipts into PADD V	Shipments from PADD V	Net Receipts PADD V
Crude Oil	3,173	43	3,130	1,314	0	1,314	14,071	1,694	12,377	0	0	0	0	16,821	-16,821
Petroleum Products	89,555	8,869	80,686	37,144	10,790	26,354	6,062	116,947	-110,885	2,568	2,569	-1	4,202	356	3,846
Natural Gasoline	0	0	0	1,420	326	1,094	338	1,078	-740	0	354	-354	0	0	0
Unfractionated Stream	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plant Condensate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Liquefied Petroleum Gases	2,579	25	2,554	7,224	2,607	4,617	2,020	9,255	-7,235	198	134	64	0	0	0
Liquefied Petroleum Gases	742	236	506	73	0	73	208	1,133	-925	0	0	0	346	0	346
Unfinished Oils	0	0	0	914	0	914	0	914	-914	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	48,770	5,755	43,015	17,032	5,059	11,973	2,032	58,918	-56,886	1,471	1,303	168	1,730	0	1,730
Finished Motor Gasoline	20,965	3,133	17,832	8,370	2,452	5,918	1,099	25,759	-24,660	723	884	-161	1,071	0	1,071
Finished Leaded Motor Gasoline	27,805	2,622	25,183	8,662	2,607	6,055	933	33,159	-32,226	748	419	329	659	0	659
Finished Unleaded Motor Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gasohol	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Aviation Gasoline	151	0	151	95	23	72	132	246	-246	23	0	23	0	0	0
Naphtha-Type Jet Fuel	663	153	510	228	132	96	90	894	-762	0	170	-170	326	0	326
Kerosene-Type Jet Fuel	8,444	358	8,086	2,480	909	1,571	90	10,674	-10,584	719	63	656	271	0	271
Kerosene	1,235	73	1,162	172	2	170	0	1,332	-1,332	0	0	0	0	0	0
Distillate Fuel Oil	22,010	2,034	19,976	6,597	938	5,659	598	26,573	-25,975	157	545	-388	728	0	728
Distillate Fuel Oil Less No. 4	21,872	2,024	19,848	6,597	938	5,659	588	26,435	-25,847	157	545	-388	728	0	728
No. 4 Fuel Oil	138	10	128	0	0	0	10	138	-128	0	0	0	0	0	0
Residual Fuel Oil	2,985	108	2,877	155	457	-302	502	3,454	-2,952	0	0	0	693	316	377
Naphtha and Other Oils for Petro.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feedstock Use	107	18	89	40	64	-24	36	101	-65	0	0	0	0	0	0
Special Naphthas	263	0	263	102	15	87	0	350	-350	0	0	0	0	0	0
Lubricants	616	64	552	174	83	91	78	809	-731	0	0	0	108	20	88
Wax	7	0	7	0	0	0	0	7	-7	0	0	0	0	0	0
Asphalt and Road Oil	192	0	192	341	0	341	28	533	-533	0	0	0	0	0	0
Miscellaneous Products	791	45	746	97	175	-78	28	676	-648	0	0	0	0	20	-20
Total All Products	92,728	8,912	83,816	38,458	10,790	27,668	20,133	118,641	-98,508	2,568	2,569	-1	4,202	17,177	-12,975

Note: Total may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.

Table 29. Production of No. 4 Fuel Oil and Residual Fuel Oil By Sulfur Content, December 1982
(Thousands of Barrels)

Commodity	PAD District I			PAD District II				PAD District III				PAD		United States				
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico		Total			
No. 4 Fuel Oil	0	3	3	0	49	0	0	0	49	39	-174	17	69	215	166	33	96	347
0.00 to 0.30% Sulfur	0	3	3	0	3	0	0	0	3	0	0	-5	0	0	-5	0	0	1
0.31 to 0.50% Sulfur	0	0	0	0	2	0	0	0	2	29	0	0	0	0	29	30	0	61
0.51 to 1.00% Sulfur	0	0	0	0	0	0	0	0	0	5	-174	0	2	215	48	0	37	85
1.01 to 2.00% Sulfur	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	3	28	36
Greater Than 2.00% Sulfur	0	0	0	0	44	0	0	0	44	0	0	22	67	0	89	0	31	164
Residual Fuel Oil	4,475	309	4,784	143	2,648	341	441	3,573	589	5,551	5,312	456	82	11,990	431	9,898	30,676	
0.00 to 0.30% Sulfur	484	24	508	0	4	0	0	4	59	142	26	110	13	350	25	646	1,533	
0.31 to 0.50% Sulfur	975	3	978	0	31	0	144	175	46	38	12	46	0	142	119	1,239	2,653	
0.51 to 1.00% Sulfur	1,802	0	1,802	143	907	0	154	1,204	414	883	934	133	5	2,369	67	1,621	7,063	
1.01 to 2.00% Sulfur	246	282	528	0	631	89	109	829	59	770	512	27	19	1,387	80	5,951	8,775	
Greater Than 2.00% Sulfur	968	0	968	0	1,075	252	34	1,361	11	3,718	3,828	140	45	7,742	140	441	10,652	

Note: Total may not equal sum of components due to independent rounding.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 30. Stocks of No.4 Fuel Oil and Residual Fuel Oil By Sulfur Content, December, 1962
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Rocky Mt.	Dist. V West Coast
No. 4 Fuel Oil -- 0.00 to 0.30% Sulfur																
Refinery	0	7	7	0	4	0	0	4	0	0	12	4	0	16	0	0
Bulk Terminal	474	0	474	0	0	0	0	0	0	0	0	0	0	0	0	474
Total	474	7	481	0	4	0	0	4	0	0	12	4	0	16	0	501
No.4 Fuel Oil -- 0.31 to 0.50% Sulfur																
Refinery	0	0	0	0	8	0	0	8	6	0	1	0	0	7	5	22
Bulk Terminal	70	0	70	0	0	0	0	0	0	0	1	0	0	1	0	71
Total	70	0	70	0	8	0	0	8	6	0	2	0	0	8	5	93
No. 4 Fuel Oil -- 0.51 to 1.00% Sulfur																
Refinery	0	0	0	0	12	0	0	12	28	236	19	3	58	344	0	379
Bulk Terminal	398	0	398	0	63	0	0	63	0	0	11	0	0	11	0	472
Total	398	0	398	0	75	0	0	75	28	236	30	3	58	355	0	851
No. 4 Fuel Oil -- 1.01 to 2.00% Sulfur																
Refinery	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	21
Bulk Terminal	393	0	393	0	0	0	0	0	0	0	0	0	0	0	0	430
Total	393	0	393	0	0	0	0	0	3	0	0	0	0	3	3	451
No.4 Fuel Oil -- Greater Than 2.00% Sulfur																
Refinery	0	0	0	0	13	0	0	13	0	0	116	74	0	190	0	221
Bulk Terminal	70	0	70	8	0	0	0	8	14	0	55	0	0	69	0	147
Total	70	0	70	8	13	0	0	21	14	0	171	74	0	259	0	368
Residual Fuel Oil -- 0.00 to 0.30% Sulfur																
Refinery	590	25	615	0	5	0	6	11	58	275	42	12	15	402	109	1,660
Bulk Terminal	4,490	0	4,490	0	25	0	0	25	0	0	2,506	2	0	2,508	0	7,023
Total	5,080	25	5,105	0	30	0	6	36	58	275	2,548	14	15	2,910	109	8,683
Residual Fuel Oil -- 0.31 to 0.50% Sulfur																
Refinery	847	4	851	0	104	0	6	110	3	25	8	97	0	133	51	2,260
Bulk Terminal	2,981	0	2,981	0	24	0	0	24	0	26	0	0	0	26	0	3,031
Total	3,828	4	3,832	0	128	0	6	134	3	51	8	97	0	159	51	5,291
Residual Fuel Oil -- 0.51 to 1.00% Sulfur																
Refinery	1,541	0	1,541	111	861	0	70	1,042	150	1,116	1,431	15	4	2,716	136	6,592
Bulk Terminal	7,056	80	7,136	66	509	11	24	610	117	246	279	0	0	642	0	8,710
Total	8,597	80	8,677	177	1,370	11	94	1,652	267	1,362	1,710	15	4	3,358	136	15,302
Residual Fuel Oil -- 1.01 to 2.00% Sulfur																
Refinery	503	108	611	0	659	139	62	860	66	567	632	14	0	1,279	52	7,097
Bulk Terminal	2,815	418	3,233	87	394	107	474	1,062	0	512	435	22	0	969	0	6,280
Total	3,318	526	3,844	87	1,053	246	536	1,922	66	1,079	1,067	36	0	2,248	52	13,377
Residual Fuel Oil -- Greater than 2.00% Sulfur																
Refinery	982	0	982	0	871	240	15	1,126	40	3,167	2,347	141	21	5,716	286	8,640
Bulk Terminal	12,215	79	12,294	0	155	52	145	352	84	832	949	17	0	1,882	0	14,864
Total	13,197	79	13,276	0	1,026	292	160	1,478	124	3,999	3,296	158	21	7,598	286	23,504
Residual Fuel Oil -- Sulfur Content Not Specified																
Pipeline	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	18
Total	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	18

Note: Total may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.

Table 31. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, December 1982
(Thousands of Barrels)

Country	Residual Fuel Oil						Total
	0.00 to 0.30%	0.31 to 0.50%	0.51 to 1.00%	1.01 to 2.00%	Greater Than 2.00%	Not Specified	
Arab OPEC							
Algeria	1,518	195	0	0	15	0	1,728
Iraq	0	0	0	0	0	0	0
Kuwait	0	0	0	0	0	0	0
Qatar	0	0	0	0	0	0	0
Saudi Arabia	0	0	0	0	0	0	0
United Arab Emirates	0	0	0	0	0	0	0
Subtotal Arab OPEC	1,518	195	0	0	15	0	1,728
Other OPEC							
Ecuador	316	0	0	0	0	0	316
Gabon	0	0	0	0	0	0	0
Indonesia	494	10	0	0	0	0	504
Iran	0	0	0	0	0	0	0
Nigeria	344	0	0	0	0	0	344
Venezuela	618	0	340	380	2,732	0	4,069
Subtotal Other OPEC	1,771	10	340	380	2,732	0	5,233
Other							
Angola	0	389	0	0	0	0	389
Australia	1	0	0	0	253	0	254
Bahamas	203	0	0	195	723	0	1,121
Bolivia	0	0	0	0	0	0	0
Brazil	312	0	49	0	0	0	361
Brunei	0	0	0	0	0	0	0
Canada	32	0	273	176	10	0	491
Congo	0	174	0	0	0	0	174
Egypt	0	0	0	0	0	0	0
France	0	0	0	0	0	0	0
Ghana	0	0	0	0	0	0	0
Liberia	0	0	0	0	0	0	0
Malaysia	0	0	0	0	621	0	621
Mexico	0	0	0	0	0	0	0
Netherlands	(s)	0	0	0	217	0	217
Netherlands Antilles	0	0	0	148	4,542	0	4,689
Norway	0	0	0	0	0	0	0
Oman	0	0	0	0	0	0	0
People's Republic of China	0	28	0	6	0	0	35
Peru	257	0	527	0	0	0	784
Puerto Rico	0	0	0	0	0	0	0
Spain	0	504	0	0	0	0	504
Syria	0	0	0	448	47	0	495
Trinidad	0	0	0	0	0	0	0
Tunisia	0	0	0	0	0	0	0
United Kingdom	0	0	49	0	239	0	289
Virgin Islands	600	628	1,533	201	973	0	3,936
Yugoslavia	0	0	0	0	0	0	0
Zaire	0	0	0	0	0	0	0
Other Western Hemisphere	0	83	277	0	196	0	556
Hemisphere	742	222	225	106	0	0	1,294
Other Eastern Hemisphere	2,147	2,027	2,934	1,280	7,821	0	16,208
Subtotal Other							
Total Imports	5,436	2,232	3,274	1,660	10,567	0	23,170

(s) Less than 500 barrels.
Note: Total may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.

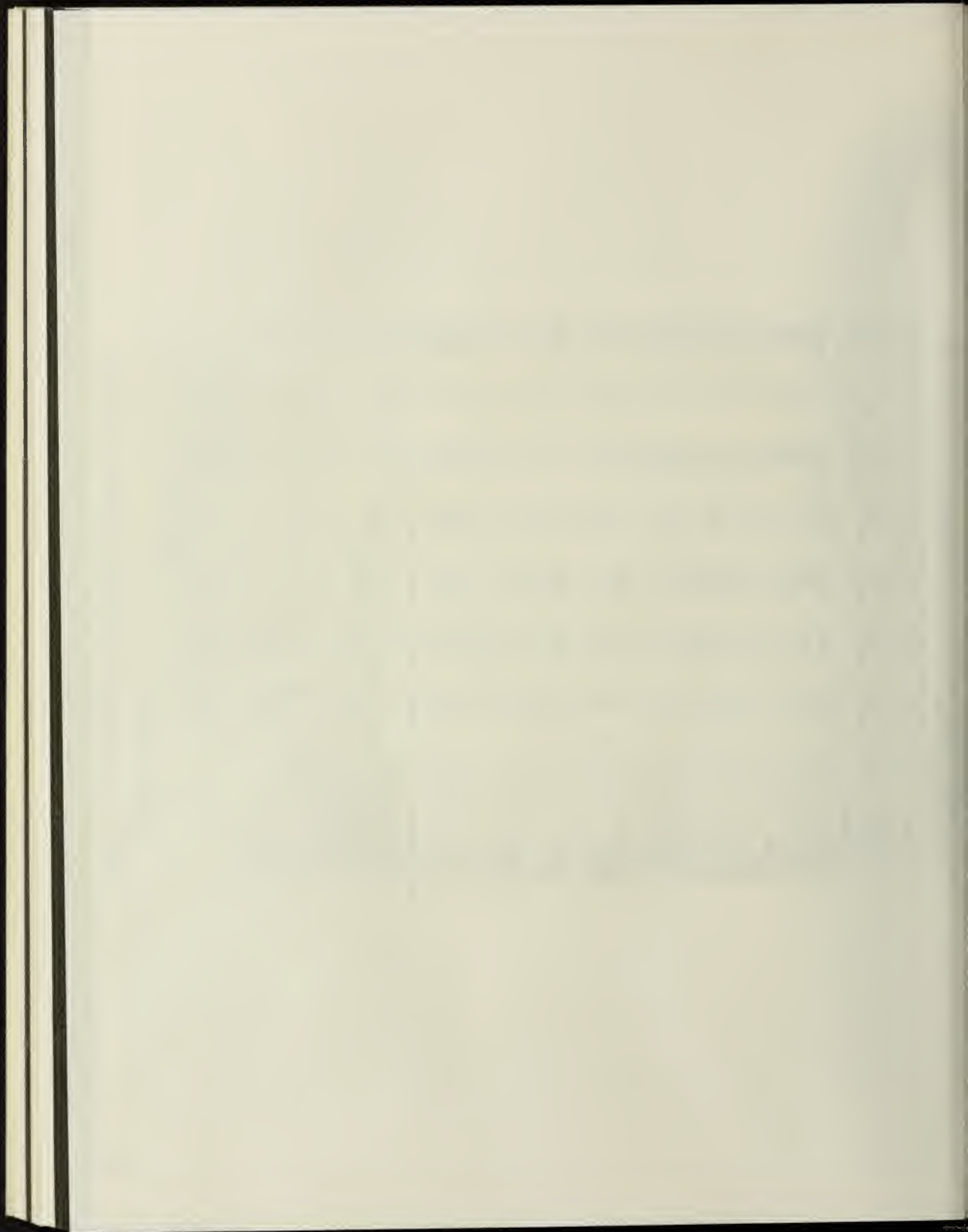
Table 32. Imports of Residual Fuel Oil by Sulfur Content by State of Entry, December 1982
(Thousands of Barrels)

State	Residual Fuel Oil						Total
	0.00 to 0.30%	0.31 to 0.50%	0.51 to 1.00%	1.01 to 2.00%	Greater Than 2.00%	Not Specified	
PAD District I	4,317	1,468	2,706	1,478	10,343	0	20,311
Connecticut	0	0	0	0	217	0	217
Delaware	359	0	0	0	0	0	359
Florida	0	0	284	0	428	0	712
Georgia	0	0	0	0	31	0	31
Maine	0	0	0	593	1,042	0	1,634
Maryland	0	0	358	329	432	0	1,119
Massachusetts	0	0	0	0	2,815	0	2,815
New Jersey	557	110	609	50	1,418	0	2,743
New York	3,144	1,252	833	408	2,347	0	7,986
North Carolina	0	0	263	0	240	0	503
Pennsylvania	257	105	359	25	424	0	1,170
Rhode Island	0	0	0	0	51	0	51
South Carolina	0	0	0	0	315	0	315
Virginia	0	0	0	74	584	0	657
PAD District II	6	0	228	61	10	0	305
Michigan	6	0	228	0	0	0	234
Minnesota	0	0	0	26	6	0	33
North Dakota	0	0	0	35	4	0	39
PAD District III	1,082	504	340	0	0	0	1,926
Louisiana	2	504	340	0	0	0	845
Texas	1,081	0	0	0	0	0	1,081
PAD District IV	0	0	0	9	0	0	9
Montana	0	0	0	9	0	0	9
PAD District V	31	261	(s)	112	214	0	618
California	0	0	0	0	214	0	214
Hawaii	5	261	(s)	112	0	0	378
Washington	26	0	0	0	0	0	26
All PAD Districts	5,436	2,232	3,274	1,660	10,567	0	23,170

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.



Glossary



Glossary

Definitions of Petroleum Products and Other Terms

Alcohol. The family name of a group of organic chemical compounds composed of carbon, hydrogen and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus hydroxyl group, $\text{CH}(\text{CH})_n\text{-OH}$. "Alcohol" includes ethanol and methanol.

Asphalt. A dark-brown-to-black cement-like material, containing bitumens as the predominant constituents, obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. The conversion factor is 5.42-gallon barrels per short ton.

ASTM. The acronym for the American Society for Testing and Materials.

Aviation Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation gasoline.

Aviation Gasoline (Finished). All special grades of gasoline for use in aviation reciprocating engines as given in ASTM Specification D 910 and Military Specification MIL-G-5572.

Barrel. A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt and wax to barrels are given in the definitions for these products.

Butane. A normally gaseous paraffinic hydrocarbon, C_4H_{10} . It is extracted from natural gas or refinery gas streams. Butane is covered by ASTM Specification D1835 and Gas Processors Association Specification for commercial butane.

- Normal Butane—A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 31.1°F . This classification includes mixtures of gases that contain 80 percent or more normal butane.
- Other Butanes—All butanes not included as normal butane or isobutane.

Butane-Propane Mixtures. Mixtures consisting exclusively of butane and propane that conform to ASTM Specification D1835 and Gas Processors Association Specification for commercial butane-propane. They are extracted from natural gas and refinery gas streams.

Butylene. An olefinic hydrocarbon, C_4H_8 , recovered from refinery processes. It is reported in the "Butane" category.

Coal. A generic term applied to carbonaceous rocks that were formed by the partial or complete decomposition of vegetation. These stratified carbonaceous rocks are either solid or brittle and are highly combustible. Includes lignite, bituminous coal, and anthracite which conform to ASTM Specification D 388.

Crude Oil (including Lease Condensate). A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Lease condensate is included. Drips are also included, but topped crude (residual oil and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign, according to the following:

- Domestic—Crude oil produced in the United States or from its outer continental shelf as defined in 43 U.S.C. 1331. Hydrocarbons such as shale oil and tar sand oil are included.
- Foreign—Crude oil produced outside the United States. Imported Athabasca hydrocarbons are included.

Distillate Fuel Oil. A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on- and off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1 and No. 2 heating oils, No. 1 and No. 2 diesel fuel oils, and No. 4 fuel oil.

- **No. 1 Fuel Oil**—A light distillate fuel oil intended for vaporizing pot-type burners. ASTM Specification D 396 specifies for this grade maximum distillation temperatures of 400° F. at the 10-percent point and 550° F. at the 90-percent point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100° F.

- **No. 2 Fuel Oil**—A distillate fuel oil for domestic heating for use in atomizing-type burners or for moderate capacity commercial-industrial burner units. ASTM Specification D 396 specifies for this grade temperatures at the 90-percent point between 540° and 640° F., and kinematic viscosities between 2.0 and 3.6 centistokes at 100° F.

- **No. 1 and No. 2 Diesel Fuel Oils**—Distillate fuel oils used in compression-ignition engines, as given by ASTM Specification D 975:

1. **No. 1-D**—A volatile distillate fuel oil in the 400° to 550° F. boiling range for engines in service requiring frequent speed and load changes. Type C-B diesel fuel, which is used for city buses and similar operations, is included.

2. **No. 2-D**—A distillate fuel oil of lower volatility in the 540° to 640° F. boiling range for engines in industrial and heavy mobile service. Type R-R diesel fuel for railroad compression-ignition engines and Type T-T for diesel-engine trucks are included.

- **No. 4 Fuel Oil**—A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D 396 or Federal Specification VV-F-815C; its kinematic viscosity is between 5.8 and 26.4 centistokes at 100° F. Also included is No. 4-D, a fuel oil for low- and medium-speed diesel engines that conforms to ASTM Specification D 975.

Eastern Hemisphere. That half of the earth east of the Atlantic Ocean which includes Europe, Asia, Africa, and Australia. The Hawaiian Foreign Trade Zone is in this hemisphere.

Electric Energy (Purchased). Electricity purchased for refinery operations that is not produced within the refinery complex.

Ethane. A normally gaseous paraffinic hydrocarbon, C_2H_6 , extracted from natural gas and refinery gas streams. "Ethane" includes any product containing 90 percent liquid volume or more ethane.

Ethane-Propane Mixtures. Mixtures of ethane and propane in which neither component is 90 percent or more of the liquid volume. It is extracted for natural gas and refinery gas streams.

Ethylene. An olefinic hydrocarbon, C_2H_4 , recovered from refinery and petrochemical processes. It is reported in the "Ethane" category.

Field Production. Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, and new supply of other hydrocarbons and alcohol.

Gas Well Gas. Natural gas produced from gas wells. Such gas may be either associated gas or non-associated gas.

- **Associated Gas**—Free natural gas in immediate contact, but not in solution, with crude oil in the reservoir.

- **Non-Associated Gas**—Free natural gas not in contact with, nor dissolved in, crude oil in the reservoir.

Imported Crude Oil Burned as Fuel. The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. "Imported crude oil burned as fuel" includes lease condensate and liquid hydrocarbons produced from tar sand oil, gilsonite, and oil shale.

Isobutane. A saturated branch-chain isomer of butane. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. This classification includes mixtures of gases that contain 80 percent liquid volume or more isobutane. It is extracted from natural gas and refinery gas streams.

Isopentane. A saturated branch-chain hydrocarbon, C_5H_{12} , obtained by fractionation of natural gasoline or isomerization of normal pentane.

Kerosene. A petroleum distillate that boils at a temperature between 300° and 550° F., that has a flash point higher than 100° F. by ASTM Method D 56, that has a gravity range from 40° to 46° API, and that has a burning point in the range of 150° to 175° F. It is a clean-burning product suitable for use as an illuminant when burned in wick lamps. Includes grades of kerosene called range oil having properties similar to No. 1 fuel oil, but with a gravity of about 43° API and having a maximum end-point of 625° F. Kerosene is used in space heaters, cook stoves, and water heaters.

Kerosene-Type Jet Fuel. A quality kerosene product with an average gravity of 40.7° API, a 10 percent distillation temperature of 400° F., and an end-point of 572° F. It is covered by ASTM Specification D 1655 and Military Specification MIL-T-5624L (Grade JP-5 and JP-8). It is used primarily for commercial turbojet and turboprop aircraft engines.

Lease Condensate. A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

Lease Separator. A surface facility used for separating casinghead gas from produced crude oil and water and separating gas from that portion of associated gas and non-associated gas that liquefies at the temperature and pressure conditions of the separator.

Liquefied Petroleum Gases (LPG). Propane, propylene, butanes, butylene, ethane-propane mixtures and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids. Formerly called "Liquefied Gases."

Liquefied Refinery Gases (LRG). Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration they are retained in the liquid state. The reported categories are ethane and/or ethylene, propane and/or propylene, butane and/or butylene, butane-propane mixtures, and isobutane. Excludes still gases used for chemical or rubber manufacture which are reported as petrochemical feedstocks and also excludes liquefied gases ready for blending into gasoline which are reported as gasoline blending components. Liquefied refinery gases are reported for use as petrochemical feedstocks, other uses, or both.

Lubricants. A substance used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. "Lubricants" includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. The three categories reported are:

- **Bright Stock**—A refined, high viscosity lubricating oil base stock that is usually made from a residuum by a treatment such as deasphalting, acid treatment, or solvent extraction.
- **Neutral**—A distillate lubricating oil base stock with a viscosity that is usually not above 55 Saybolt Universal Seconds (SUS) at 100° F. It is prepared by a treatment such as hydrofining, acid treatment, or solvent extraction.
- **Other**—A lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils.

Miscellaneous Products. Includes all finished products not classified elsewhere. "Miscellaneous products" include petrolatum, absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and other finished products.

Motor Gasoline Blending Components. Finished components in the gasoline range that will be used for blending or compounding into finished motor gasoline. Pool gasoline is included in this category.

Motor Gasoline (Finished). A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition

engines. Specifications for motor gasoline, as given in ASTM Specification D 439 or Federal Specification VV-G-1690B, include a boiling range of 122° to 158° F. at the 10-percent point to 365° to 374° F. at the 90-percent point and a Reid vapor pressure range from 9 to 15 psi. "Motor gasoline" includes finished leaded gasoline, finished unleaded gasoline, and gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

- **Finished Leaded Gasoline**—Contains more than 0.05 grams of lead per gallon or more than 0.005 grams of phosphorus per gallon. The actual lead content of any given gallon, however, may vary as a function of the size of the producer and company according to specific Environmental Protection Agency waiver provisions. Premium and regular grades are included, depending on the octane rating.
- **Finished Unleaded Gasoline**—Contains up to 0.05 grams of lead per gallon and 0.005 grams of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating.
- **Gasohol**—A blend of alcohol and finished motor gasoline that is no more than 90 percent of finished motor gasoline (leaded or unleaded as described above) and no less than 10 percent or more alcohol (ethanol or methanol).

Motor Gasoline (Total). Includes finished leaded motor gasoline, finished unleaded motor gasoline, motor gasoline blending components, and gasohol.

Naphtha-Type Jet Fuel. A fuel in the heavy naphtha boiling range with an average gravity of 52.8° API and 20 to 90 percent distillation temperatures of 290° to 470° F., meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. This category excludes ram-jet and petroleum rocket fuels, which are included in the "Miscellaneous Products" category.

Natural Gas. A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

Natural Gas Field Facility. A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, butane, natural gasoline, etc., and to control the quality of natural gas to be marketed.

Natural Gas Plant Liquids. Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials, and are classified as follows: Ethane, propane, ethane-propane mix, isobutane, butane, butane-propane mix, isopentane, natural gasoline, plant condensate, unfractionated stream, and other products from natural gas processing plants (i.e., products meeting the standards of finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

Natural Gas Processing Plant. A facility designed to recover natural gas liquids from a stream of natural gas that may or may not have been processed through lease separators or natural gas field facilities. The facility also controls the quality of natural gas to be marketed. Cycling plants are classified as gas processing plants.

Natural Gasoline. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Producers Association.

OPEC. The acronym for the Organization of Petroleum Exporting Countries, oil-producing and-exporting countries that have organized for the purpose of negotiating with oil companies on matters of oil production, prices, and future concession rights. Current members are Algeria,, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

Operable Distillation Capacity. The maximum amount of input that can be processed by a crude oil distillation unit in a 24-hour period, making allowances for processing limitations due to types and

grades of inputs, limitations of downstream facilities, scheduled and unscheduled downtimes, an environmental constraints. Includes any shutdown capacity that could be placed in operation within 90 days.

Other Hydrocarbons. Materials received by a refinery and consumed as raw materials. Includes hydrogen, coal, tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

Petrochemical Feedstocks. Chemical feedstocks derived from petroleum, principally for the manufacture of synthetic rubber and a variety of plastics. The categories reported are "Naphtha-less than 400° F. end-point" and "Other oils over 400° F. end-point."

- Naphtha less than 400° F. end-point—A naphtha with an end point of less than 400° F. and that is reported as used as a petrochemical feedstock.
- Other oils over 400° F. end-point—Oils with an end point over 400° F. and that are reported as used as a petrochemical feedstock.

Petroleum Coke. A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is 5.42-gallon barrels per short ton.

- Marketable Coke—Those grades of coke that are produced in delayed or fluid cokers and which may be recovered as relatively pure carbon. This "green" coke may be sold or further purified by calcining.
- Catalyst Coke—In many catalytic operations (i.e., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon which is used as fuel in the refinery process. This carbon or coke is not recoverable in concentrated form.

Petroleum Products. Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, natural gasoline and isopentane, plant condensate, unfractionated stream, ethane, liquefied petroleum gases, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, naphtha less than 400° F. end-point, other oils-over 400° F. end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Petroleum Refinery. An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas plant liquids, other hydrocarbons, and alcohol.

Plant Condensate. One of the natural gas plant liquids, mostly pentanes and heavier hydrocarbons recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

Primary Stocks. Stocks of crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tankfarms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in transit from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. "Primary Stocks" excludes stocks of foreign origin that are held in bonded warehouse storage.

Propane. A normally gaseous hydrocarbon, C_3H_8 , extracted from natural gas and refinery gas streams. It is used primarily as a fuel and as a petrochemical feedstock. Propane is covered by ASTM Specification D1835, Gas Processors Association for commercial and HD-5 propane, and ASTM Specification for special duty propane.

Propylene. An olefinic hydrocarbon, C_3H_6 , recovered from refinery and petrochemical processes. It is reported in the "Propane" category.

Residual Fuel Oil. Topped crude of refinery operations. "Residual Fuel Oil" includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D 396 and Federal Specification VV-F-815C; Navy Specification fuel oil as defined in Military Specification MIL-F-859E including Amendment 2; Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Imports of residual fuel oil include "Imported Crude Oil Burned as Fuel."

Road Oil. Any heavy petroleum oil, including residual asphaltic oils, used as a dust palliative and surface treatment of roads and highways. It is generally produced in six grades; from 0, the most liquid, to 5, the most viscous.

Special Naphthas. All finished products within the gasoline range that are used as paint thinners, cleaners, and solvents. These products are refined to a specified flash point and have a boiling range of 90° to 220° F. "Special naphthas" includes all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D 484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

Steam (Purchased). Steam that is purchased for use by a refinery that was not generated from within the refinery complex.

Still Gas (Refinery Gas). Any form or mixture of gas produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, butane, butylene, propane, propylene, etc. Still gas is reported for petrochemical feedstock use and refinery fuel use.

- **Petrochemical Feedstock Use**—Includes all refinery streams which are used by chemical or rubber manufacturing operations for further processing, less the amount of such streams returned to the source refinery. Finished petrochemical products are not included. For example, polyethylene, butadiene, etc. are considered petrochemical products; therefore, only their feedstock equivalents are included.
- **Fuel Use**—All other still gas.

Strategic Petroleum Reserve (SPR). Stocks (currently, only crude oil) maintained by the Federal Government for use during periods of major supply interruption.

Unfinished Oils. Includes all oils requiring further processing, except those requiring only mechanical blending.

Unfractionated Stream. Mixtures of unsegregated natural gas plant liquid components excluding those included in plant condensate. This product is extracted from natural gas.

Wax. A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is a light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades reported are microcrystalline, crystalline—fully refined, and crystalline—other. The conversion factor is 280 pounds per 42-gallon barrel.

- **Microcrystalline Wax**—Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics:

- Penetration at 77° F. (D-1321)—60 maximum.
- Viscosity at 210° F. in Saybolt Universal Seconds (SUS)
 - (D-88)—60 SUS (10.22 centistokes) minimum to 150
 - SUS (31.8 centistokes) maximum.
- Oil content (D-721)—5 percent minimum.

- **Crystalline-Fully Refined Wax**—A light-colored paraffin wax having the following characteristics:

- Viscosity at 210° F.
 - (D-88)—59.9 SUS (10.18 centistokes) maximum.
- Oil Content (D-721)—0.5 percent maximum.
- Other +20 color, Saybolt minimum.

- **Crystalline-Other Wax**—A paraffin wax having the following characteristics:

- Viscosity at 210° F. (D-88)—59.9 SUS (10.18 centistokes) maximum.
- Oil Content (D-721)—0.51 percent minimum to 15 percent maximum.

Western Hemisphere. That half of the earth that includes North and South America and the surrounding waters.

Bureau of Mines Petroleum Refining Districts and PAD Districts

PAD District

Refining District

I

East Coast—District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

Appalachian #1—The State of West Virginia, those parts of the States of Pennsylvania and New York not included in the East Coast District.

Appalachian #2—The following counties of the State of Ohio: Erie, Huron, Crawford, Marion, Delaware, Franklin, Pickaway, Ross, Pike, Scioto, and all counties east thereof.

Indiana—Illinois—Kentucky—The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and that part of the State of Ohio not included in the Appalachian District.

II

Minnesota—Wisconsin—North and South Dakota—The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

Oklahoma—Kansas—Missouri—The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

Texas Inland—The State of Texas except the Texas Gulf Coast District.

Texas Gulf Coast—The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

III

Louisiana Gulf Coast—The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelle, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

North Louisiana—Arkansas—The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

New Mexico—The State of New Mexico.

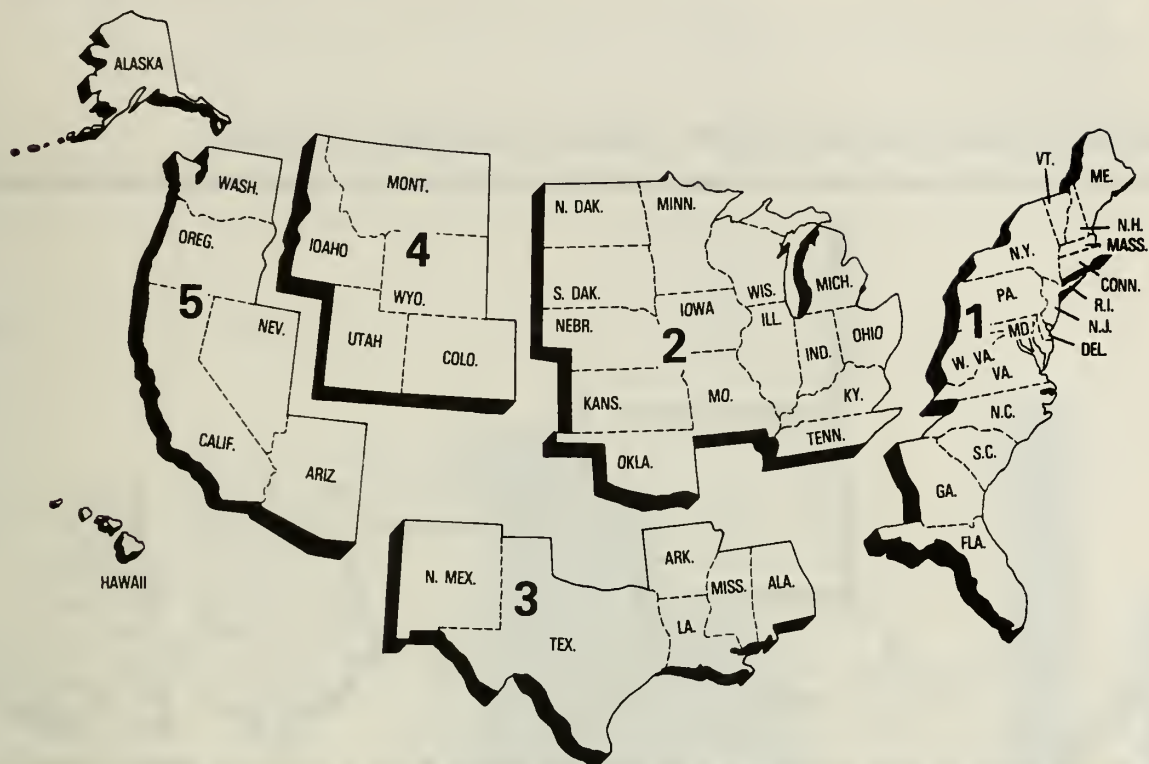
IV

Rocky Mountain—The States of Montana, Idaho, Wyoming, Utah, and Colorado.

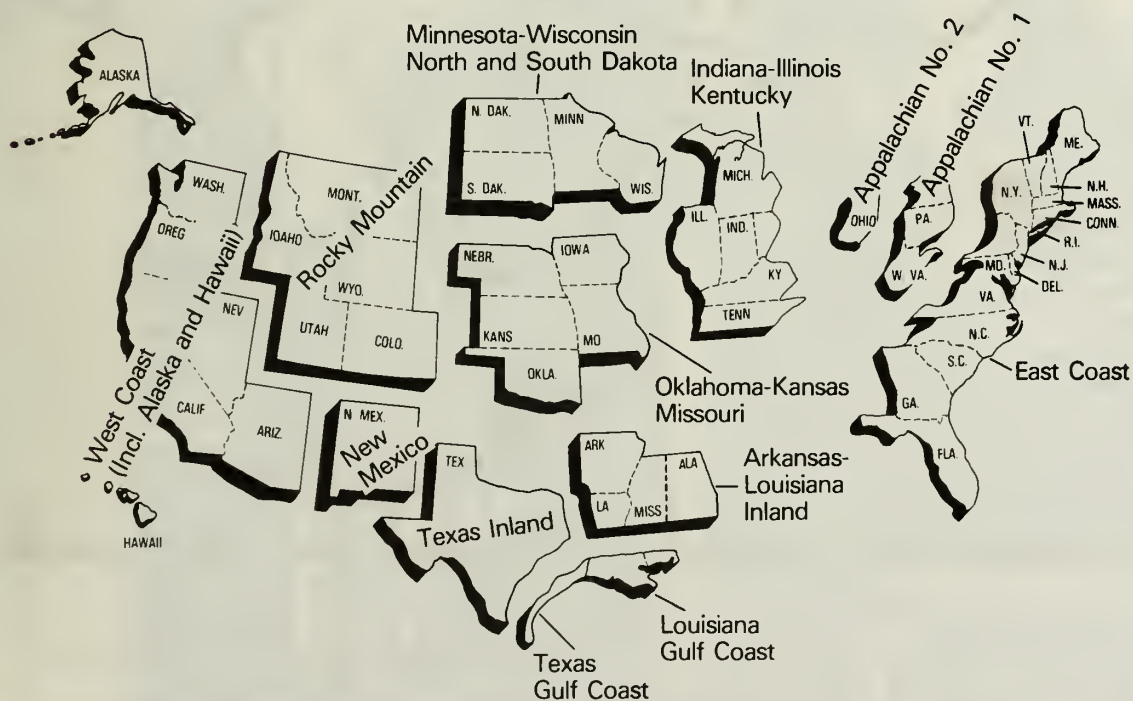
V

West Coast—The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

Petroleum Administration for Defense (PAD) Districts



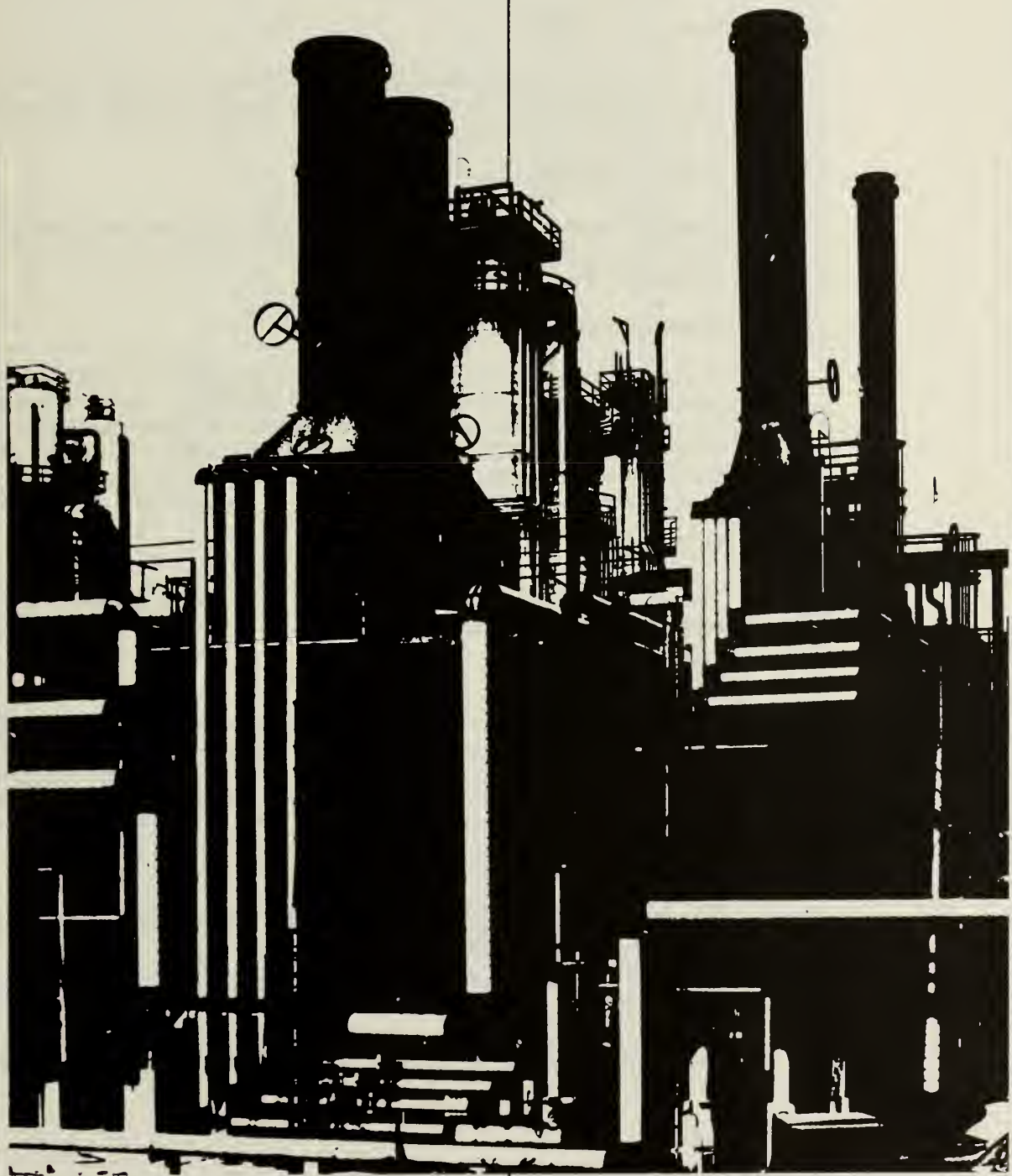
Bureau of Mines Refining Districts



District Map Oil and Gas Division Railroad Commission of Texas



Explanatory Notes



Explanatory Notes

Note 1.1 EIA-64: Natural Gas Liquids Operations Report

Background

The EIA-64, "Natural Gas Liquids Operations Report" evolved from a survey designed and conducted by the United States Geological Survey beginning in 1911. This form collects data on the production and storage of natural gas plant liquids at natural gas processing plants and fractionators.

Description of Survey

Universe

The universe includes all operators of facilities designed to: (1) extract liquid hydrocarbons from natural gas streams (natural gas processing plants); (2) separate a combined products liquid hydrocarbon stream into its component products, i.e. propane, butane, natural gasoline, etc. (fractionators); or (3) store the liquid hydrocarbon output of plants and fractionators.

The mailing list is automated. It is maintained by matching periodically with the *LP Gas Almanac* listings (including supplements) and the *Oil and Gas Journal* Processing Plant Survey listings, and by making changes reported by the respondents.

Information Collected

The data are submitted monthly by facility and include all products that the company controls through possession, regardless of ownership. The main items of information collected by the EIA-64 are shown by the example of the form presented below.

Collection Methods

Completed reports are required to be postmarked 20 days following the last day of the report month. Follow-up telephone calls are made to nonrespondents in order to collect data before publication of the aggregated data.

Imputing Missing Data

Imputation is performed only for companies that submitted a report in the previous month. For such companies, previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. The value of shipments is adjusted to balance stock level, production, receipts, plant fuel use, and losses. In the event that the previous month's data were estimated, the respondent is contacted and requested to submit estimates, if necessary, to be followed by a resubmission of actual data.

Response Rates

The initial response rate averages 85 percent, with a final response averaging 98 percent as a result of telephone follow-up procedures.

Data Processing

Upon receipt, the reports are reviewed for identification section omissions, duplicate submissions, and identification information changes. The data are then entered and edited. The edit program includes checks for invalid data entry codes, range checks for current-month to previous-month changes (absolute and relative), arithmetic calculation errors, line balancing errors, etc. Telephone calls are made to respondents to resolve questions.

Note 1.2 EIA-87, 88, 89 and 90: Joint Petroleum Reporting System

Background

The Joint Petroleum Reporting System (JPRS) comprises four surveys: the "Refinery Report" (EIA-87); the "Bulk Terminal Stocks Report" (EIA-88); the "Pipeline Products Report" (EIA-89); and the

**U.S. Department of Energy
Energy Information Administration
Mail Station: BG-086 Forstl
Washington, D.C. 20585**

Natural Gas Liquids Operations Report

This Report is Mandatory Under Public Law 93-275. Failure to Comply may Result in Criminal Fines, Civil Penalties and Other Sanctions as Provided by Law

Report Type	EIA Company Identification Number	Report Date (Last Day of Reporting Month)	Zip Code of Plant Location	If Resubmission, Insert X in Block

Form Approved
OMB No 1905-0109

For DOE Use Only

Plant Name

Section 1. Natural Gas Processing Plant and Fractionator Operations (Barrels of 42 Gallons)

Products	Product Code	Stocks Beginning of Month (a)	Receipts During Month (b)	Inputs During Month (c)	Production During Month (d)	Shipments To					Plant Fuel Use (k)	Losses (m)	Stocks End of Month (n)
						Fractionating Facility (e)	Storage Facility (f)	Refinery (g)	Chemical Plant (h)	Other (i)			
Ethane	110												
Propane	231												
Ethane Propane Mix	241												
Isobutane	233												
Normal Butane	235												
Other Butanes	236												
Butane-Propane Mix	234												
Isopentane	240												
Natural Gasoline													
14# and Less RVP	228												
Over 14# RVP	229												
Plant Condensate	210												
Unfractionated Stream	227												
Gasoline								X					
Finished Aviation	111												
Finished Leaded	132												
Finished Unleaded	133												
Gasohol	135												
Special Naphthas	051												
Jet Fuel													
Naphtha Type	211												
Kerosene Type	213												
Kerosene	311												
Distillate Fuel Oil	412												
Other Products (Specify)													
Overage (inputs) or Shortage (production)	911						X		X		X	X	X

"Crude Oil Stocks Report" (EIA-90). This group of forms collects data on petroleum refinery operations and on storage of crude oil and petroleum products. The origins of JPRS lie in the voluntary petroleum reporting systems instituted by the Bureau of Mines (BOM) soon after it was established as a part of the Department of the Interior in May 1910.

Description of Survey

Universe

The respondent universe of each JPRS survey is defined as follows:

EIA-87: All petroleum refineries and plants producing finished motor gasoline through the mechanical blending of liquids which are operated or controlled in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Hawaiian Foreign Trade Zone, and Guam.

EIA-88: All bulk terminal facilities in the 50 States and the District of Columbia, Puerto Rico, and the Virgin Islands that (a) have total bulk storage capacity of 50,000 barrels or more and/or (b) receive petroleum products by tanker, barge, or pipeline regardless of ownership of the material.

EIA-89: All products pipeline companies that carry petroleum products (including interstate, intrastate and intracompany pipelines) in the 50 States and the District of Columbia.

EIA-90: Crude oil pipeline companies (gathering and trunk pipeline companies), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water (in excess of 1,000 barrels), regardless of ownership in the 50 States and the District of Columbia.

The list of respondents is kept current by checking for new respondents in the *Oil and Gas Journal* weekly magazine; newspaper articles; the Office of Resource Applications publication "Trends in Refinery Capacity & Utilization;" the Office of Refinery Operations (ERA) list of U.S. Refiners; and the annual survey EIA-177 "Capacity of Petroleum Refineries."

Information Collected

The main items of information collected by EIA-87, are shown by the example presented below. The EIA-88 and EIA-89 collect data on petroleum product stocks. The EIA-90 collects data on crude oil stocks and crude oil used directly as fuel.

Collection Methods

The data for the JPRS surveys are collected on a monthly basis. Completed forms are required to be postmarked by the 20th day following the report month. Telephone follow-up calls are made to nonrespondents in order to collect data before publication deadline. An automated mailing list is maintained and is used to monitor receipt of the forms.

Imputing Missing Data

Imputation is performed only for companies that submitted a report in the previous month. For these companies, the previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. The value of shipments is adjusted to balance stock level, production receipts, and losses. In the event that previous month's data were estimated, the respondent is contacted and requested to submit estimates if necessary, to be followed by a resubmission of actual data.

Response Rates

As of the filing deadline, the response rate of the JPRS respondents is over 90 percent. All companies that have not responded are contacted by telephone. Although data are taken by telephone to expedite processing, a certified submission is still required. Thirty calendar days after the report month, data for companies that still fail to file the form are estimated based on prior month's data. Names of companies that fail to file for two consecutive months are forwarded to DOE for further noncompliance action. Final response rate is 100 percent.

Report Type: **B 0 1** EIA Company Identification No.: Report Period:
Yr. Mo.

SECTION 6. REFINERY STOCKS, RECEIPTS, INPUTS, PRODUCTION, SHIPMENTS AND REFINERY FUEL USE AND LOSSES (Thousands of Barrels of 42 Gallons)								
ITEM DESCRIPTION	PRO- DUCT CODE	STOCKS BEGINNING OF MONTH A	RECEIPTS DURING MONTH B	INPUTS DURING MONTH C	PRODUCTION DURING MONTH D	SHIPMENTS DURING MONTH E	REFINERY FUEL USE AND LOSSES DURING MONTH F	STOCKS END OF MONTH G
Crude oil (incl. lease condensate) Total (sum of codes 010 and 020)	050				X			
Domestic (incl. Alaskan)	010	X		X	X	X	X	X
Foreign	020	X		X	X	X	X	X
Alaskan	011	X		X	X	X	X	X
Products of natural gas proc. plants								
Ethane	110				X			
Propane	231				X			
Ethane-propane mixtures	241				X			
Isobutane	233				X			
Normal butane	235				X			
Other butanes	236				X			
Butane-propane mixtures	234				X			
Natural gasoline and isopentane	220				X			
Plant condensate	210				X			
Unfractionated stream	227				X			
Other hydrocarbons and hydrogen					X			
Alcohol	091				X			
Unfinished oils	812							
Gasoline								
Finished leaded, motor	132							
Finished unleaded, motor	133							
Blending components, motor	134							
Gasohol	135							
Finished aviation	111							
Blending components, aviation	112							
Special naphthas (solvents)	061							
Jet fuel								
Naphtha-type	211							
Kerosene-type	213							
Kerosene (incl. range oil)	311							
Distillate fuel oil Less No. 4	412							
No. 4 fuel oil	414							
Residual fuel oil	511							
Lubricating oils								
Bright stock	853							
Neutral	855							
Other	859							
Asphalt	900							
Wax								
Microcrystalline	061							
Crystalline-fully refined	071							
Crystalline-other	081							
Petroleum coke								
Marketable	021							
Catalyst	022	X						X
Road oil	031							
Still gas		X						X
Petrochemical feedstock use	042	X						X
Other use	044	X						X
Ethane and/or ethylene								
Petrochemical feedstock use	612							
Other use	652							
Propane and/or propylene:								
Petrochemical feedstock use	613							
Other use	653							
Butane and/or butylene:								
Petrochemical feedstock use	614							
Other use	654							
Butane-propane mixtures								
Petrochemical feedstock use	816							
Other use	656							
Isobutane petrochemical feedstock use	615							
Naphtha—less than 400° end-point								
Petrochemical feedstock use	822							
Other oils—over 400° end-point								
Petrochemical feedstock use	824							
Other finished products								
Non-fuel use	097							
Fuel Use	098							
Overage (Inputs) or shortage (production)	911	X	X			X	X	X
TOTAL	999	X	X			X	X	X

Note 1.3 EIA-161, 162, 163, 164 and 165: Weekly Petroleum Reporting System

Background

The Weekly Petroleum Reporting System (WPRS) comprises five surveys: the "Refinery Report" (EIA-161); the "Bulk Terminal Stocks Report" (EIA-162); the "Pipeline Product Stock Report" (EIA-163); the "Crude Oil Stocks Report" (EIA-164); and the "Imports Report" (EIA-165).

The EIA weekly reporting system was designed to collect data similar to those collected under the monthly Joint Petroleum Reporting System (JPRS) (See Note 1.2). In the WPRS, selected petroleum companies report weekly data to EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On the Forms EIA-161 through EIA-164, companies report data on a custody basis. On the Form EIA-165, the importer of record reports each shipment entering the United States. Current weekly data and the most recent monthly data from the JPRS are used to estimate the published weekly totals.

Description of Survey

Universe

The sample of companies that report weekly in the WPRS was selected from the universe of companies that report monthly in either the JPRS system or the ERA-60 system (for imports). All sampled companies report data only for facilities in the 50 States and the District of Columbia.

The sampling frame for each weekly survey is defined as follows:

EIA-161: Uses the EIA-87 universe, which includes all petroleum refineries in the United States and its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and bulk terminals that blend motor gasoline.

EIA-162: Uses the EIA-88 universe, which includes all bulk terminal facilities in the United States and its territories that have total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline.

EIA-163: Based on the EIA-89 universe, which includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including interstate, intrastate and intracompany pipeline movements. Pipeline companies that only transport natural gas liquids are not included in the EIA-163 frame. Only those pipeline companies which transport products covered in the weekly survey are included.

EIA-164: Uses the EIA-90 universe, which consists of all trunk pipeline companies in the United States and its territories which transport crude oil, all refining companies, all crude oil producers, all terminal operators, and all storers of 1,000 barrels or more of crude oil.

EIA-165: Uses the ERA-60 universe, which includes all importers of record of crude oil and petroleum products into the United States and Puerto Rico.

Sampling

The sampling procedure used for the weekly system is the cut-off method. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous period. Companies are chosen for the sample beginning with the largest and adding companies until the total sample covers about 90 percent of the total for the previous time period.

Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. All canvassed firms and terminal operating companies must file by 5:00 p.m. on the Monday following the close of the report period, 7 a.m. Friday. During the processing week, company corrections of the prior week's data are also entered.

Formula and Calculations

After the company reports have been checked and entered into the weekly data base, ratio estimates of the weekly totals are calculated from the reported data.

First, the current week's data for a given product reported by companies in that region are summed. (Call this weekly sum, W_s .) Next, the most recent month's data for the product reported by those same companies are summed. (Call this monthly sum, M_s .) Finally, let M_t be the sum of the most recent month's data for the product as reported by *all* companies. Then, the current week's ratio estimate for that product for all companies is given by.

$$W_t = \frac{M_t}{M_s} \circ W_s$$

This procedure is used directly to estimate total weekly inputs to refineries and production.

To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Under such conditions, the ratio method is known to result in large errors. Hence, a number of other procedures for estimating weekly imports were considered. The average ratio method was selected for estimating imports because it produces estimates that were close to benchmark values computed from monthly data. Estimates are obtained using the ratio method, but with each company in turn omitted from the sample. These estimates are then averaged to obtain the average ratio estimate.

Imputing Missing Data

The ratio method of estimation automatically imputes for nonresponse. Data from companies that do not respond are excluded from both the weekly and the monthly totals for the sampled companies.

Response Rates

The response rate as of the day after the filing deadline is about 80 percent for the EIA-161; 75 percent for the EIA-162; 95 percent for the EIA-163; 80 percent for the EIA-164; and greater than 95 percent for the EIA-165. However, more forms are received the next day, bringing the final response rates up. Late respondents are contacted by telephone. Nearly all of the major companies report on time. The nonresponse rate for the published estimates is usually between 2 percent and 5 percent.

Note 1.4 EIA-170: Tanker and Barge Shipments of Crude Oil and Petroleum Products Between Districts

Background

The EIA-170 survey collects data for calculation of monthly petroleum supply and disposition figures on U.S. and PAD District levels.

Instrument and Design

This form is designed to collect data on total movements by tanker and barge of crude oil and petroleum products between PAD Districts or between PAD Districts and the Panama Canal, by shipping State and receiving State.

Universe

The respondent universe of the EIA-170 consists of all known companies and plants that have custody of crude oil and petroleum products transported by tanker and barge between PAD Districts or between PAD Districts and the Panama Canal. There are currently about 60 respondents.

Collection Methods

Survey data are collected by mail every month. The filing deadline is the 20th calendar day of the month following the report period. The response rate as of the filing deadline is about 98 percent. Late respondents are contacted by telephone. All responses are processed each month before release of the data for publication.

Note 1.5 ERA-60: Reports of Oil Imports into the United States and Puerto Rico

Background

The "Report of Oil Imports into the United States and Puerto Rico" (ERA-60) survey was designed by the Economic Regulatory Administration (ERA) of the Department of Energy to collect data on port of entry, country of origin, destination, and quantity of imported crude oil and petroleum products, as well as sulfur content and API gravity. All licensed importers and importers of record are required to report. The "Shipments of Refined Products from Puerto Rico to the United States" (P-133-M-O) survey was designed to collect data on imports to the United States that are not covered by the ERA-60.

Universe

The monthly submission of Form ERA-60 and P-133-M-O is required by all licensed importers and importers of record into the United States and Puerto Rico. The respondent universe consisted of approximately 750 firms as of June 30, 1981. The respondent universe for these surveys is updated whenever an import license is granted by the Office of Oil Imports of the ERA.

Collection Methods

The survey data are collected by mail each month. It is mandatory for each respondent to file the ERA-60/P-133-M-O by the 15th working day of the month following the reporting period. Resubmissions are received frequently and are processed when received.

Response Rates

In December 1980, the survey had a response rate of 92 percent by the filing deadline. The universe was 640 at that time. (Because this is a dynamic survey, the universe is constantly changing.) Standard followup of nonrespondents is made to insure that all reports are received, since data are not imputed for nonrespondents. Response rate is generally 98-99% by the time the data are first published. Revised publications are not generated as standard operating procedure. The ERA-60 file is never closed; resubmissions are constantly received and processed.

Note 1.6 Census Import (IM-145) and Export (EM-522 and EM-594) Tabulations

The foreign trade statistics program, conducted by the Bureau of the Census, involves compilation and dissemination of a large body of data relating to the imports and exports of the United States.

Import Statistics

Coverage

The import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. Customs territory (includes the 50 States, the District of Columbia, and Puerto Rico), without regard to whether or not a commercial transaction is involved. In general, the statistics record the physical movement of merchandise into the United States from foreign countries, with the exception of the following types of transactions that are excluded from the statistics:

1. Merchandise shipped in transit through the United States, when documented with Customs as an intransit movement.

2. Shipments between the United States and Puerto Rico, the Virgin Islands, Guam, American Samoa, and other U.S. possessions; shipments between any of these outlying areas; and imports into U.S. possessions from foreign countries.

3. U.S. merchandise returned by U.S. Armed Forces for their own use.

Source of Import Information

The official U.S. import statistics are compiled by the Bureau of the Census from copies of the import entry and warehouse withdrawal forms that importers are required by law to file with Customs officials (Customs Forms 7501- 7505).

Imported petroleum is reported as "Imports for Consumption." Imports for consumption are a combination of entries for immediate consumption and withdrawals from warehouses for consumption. With certain exceptions as indicated above, these data generally reflect the total of commodities entered into U.S. consumption channels.

Country and Area of Origin

The country reported in the statistics as the country of origin is defined as the country where the merchandise was grown, mined, or manufactured. In instances where the country of origin cannot be determined, the transactions are credited to the country of shipment.

Export Statistics

Coverage

The export statistics reflect both government and nongovernment exports of domestic and foreign merchandise from the U.S. Customs territory (includes the 50 States, the District of Columbia, and Puerto Rico) to foreign countries, without regard to whether or not the exportation involves a commercial transaction. In general, the statistics record the physical movement of merchandise out of the United States to foreign countries, with the exception of the following types of transactions:

1. Shipments between the United States and Puerto Rico, the Virgin Islands, Guam, American Samoa, and other U.S. possessions; between any of these outlying areas; and shipments from U.S. Possessions to foreign countries.

2. Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.

3. Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

Source of Export Information

The official U.S. export statistics are compiled by the Bureau of the Census primarily from copies of Shipper's Export Declarations. Shipper's Export Declarations are required to be filed with Customs officials, except when qualified exporters have been authorized to submit data in the form of magnetic tape, punched cards, or monthly Shipper's Summary Export Declarations directly to the Bureau of the Census.

Country and Area of Destination

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

Note 2 Estimation

The geographic coverage of all estimates is the 50 United States and the District of Columbia, including adjacent areas of the outer continental shelf, excluding the Hawaiian Foreign Trade Zone.

Note 2.1 Supply

The components of petroleum supply are field production, refinery production, imports, stock withdrawal or addition, crude oil used directly, and losses.

Field Production is the sum of crude oil (including lease condensate) production, natural gas processing plant production, and new supply (field production) of other liquids used by refineries.

Crude oil production is estimated based on data received from State conservation and revenue agencies. Reports of crude oil production from each of the 31 producing States are not received until several months after the other components of petroleum supply described in Explanatory Note 2.1 are available for publication. For an explanation of the crude oil estimation procedure used until the State reports are complete, see Explanatory Note 2.2.

Field production of natural gas plant liquids (NGPL), including finished petroleum products, is reported monthly on survey Form EIA-64, "Natural Gas Liquids Operation Report." Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. For survey description and other detail, see Explanatory Note 1.1.

Field production of natural gas plant liquids (NGPL), including finished petroleum products, is reported monthly on survey Form EIA-64, "Natural Gas Liquids Operations Report." Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. For survey description and other detail, see Explanatory Note 1.1.

Refinery Production of LRGs, ethane, and finished petroleum products is reported monthly on survey Form EIA-87, "Refinery Report." Published production of these products equals refinery production minus refinery input. Refinery production of unfinished oils and of motor and aviation gasoline blending components appears on a net basis under refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month.

Refinery production is also reported weekly on survey Form EIA-161, "Refinery Report." See Explanatory Notes 1.2 and 1.3 for survey descriptions and other detail. It should also be noted that refineries do not report production of crude oil, natural gasoline, isopentane, unfractionated stream, plant condensate, or other hydrocarbons and alcohol.

Imports of crude oil and petroleum products are reported monthly on Form ERA-60, "Report of Oil Imports into the United States and Puerto Rico," and Form P-133-M-O, "Shipments of Refined Products (including unfinished oils) from Puerto Rico to the United States." In addition, the Census Bureau Tabulation IM-145 summarizes import data from Customs import declarations reported on Customs Forms 7501 and 7505. The most prominent difference between the EIA and Census systems appears in imports of liquefied petroleum gases (LPG), where Census data show a much higher level of imports than Energy Information Administration data. This occurs because the ERA-60 respondent frame was built by monitoring importers of licensed products and because LPGs are not licensed products. Therefore, respondents that only import LPGs have not been identified, and do not report these imports to the Department of Energy. Since these importers are required to file form 7501 with the U.S. Customs Service, EIA obtains data on imports of LPGs from Census Tabulation IM-145. Additional data taken from the IM-145 are relatively small quantities of naphtha and kerosene-type jet fuels, distillate fuel oils, and residual fuel oils withdrawn from bonded storage for use in international trade and for military offshore use. Even though these duty-free fuels are stored on United States shores, they did not enter the United States for domestic consumption and therefore are not included in the ERA-60 reporting system.

Imports are also reported weekly on survey Form EIA-165, "Imports Report." See Explanatory Notes 1.3, 1.5, and 1.6 for survey descriptions and other detail.

Stock Withdrawal (+) or Addition (-) is calculated by subtracting stocks at the end of the month from stocks at the beginning of the month. (Note: The beginning stocks of one month are equal to the ending stocks of the previous month.) A positive result (+) would represent a withdrawal from stocks and an increase in petroleum supplies distributed for domestic consumption. A negative result (-) would represent a buildup of stocks and reduce petroleum supplies distributed for domestic consumption. For survey forms used to make stock withdrawal or addition calculations see Explanatory Note 2.4.

Unaccounted-for Crude Oil is a balancing item that represents the difference between crude oil supply and disposition. Crude oil supply is the sum of field production, imports and stock withdrawal or addition, less crude used directly and losses. Crude oil disposition is the sum of exports and refinery input.

Unaccounted-for crude oil is calculated by subtracting crude oil supplies from crude oil disposition. A negative result indicates that refiners and exporters reported use of more crude oil than was reported to have been available to them. (This occurs, for example, when imports are undercounted due to late reporting or other problems.) A negative result would indicate that more crude oil was reported to have been supplied to refiners and exporters than they reported used. This calculation is performed for crude oil to ensure that product supplied for crude oil is always zero.

Crude Oil Used Directly and Losses is the sum of crude oil losses at refineries, crude oil burned at refineries, and crude oil burned on leases. Crude oil losses and consumption at refineries are reported on Form EIA-87, "Refinery Report." Crude oil burned on leases is reported on Form EIA-90, "Crude Oil Stocks Report." Crude oil burned on leases is divided into two categories: crude burned as residual fuel oil and crude burned as distillate fuel oil. Crude burned on leases appears as a negative supply to crude oil (a reduction in crude oil supplies) and as a positive supply to residual and distillate fuel oil (an increase to these supplies).

Note 2.2: Domestic Crude Oil Production

Data for the Crude Oil Production System (COPS) are reported to the Department of Energy by each of the individual State conservation agencies, which collect crude oil production values for tax purposes. In addition, the U.S. Geological Survey reports the volume of crude oil that is produced offshore in Federally-owned waters. With the exception of six State conservation agencies, all of these reports are received monthly. After each calendar year, these monthly numbers are updated using the annual reports from the State conservation agencies and the U.S. Geological Survey. The six States that do not report monthly values are Indiana, New York, Ohio, Pennsylvania, West Virginia, and Wyoming. Monthly values are estimated for these States using the individual linear trends of their historical annual crude oil production values.

There is a time lag of approximately 3 to 4 months between the end of the reporting month and the time when the actual values are available for this publication. In order to provide more timely crude oil production estimates, the Department of Energy has established a series of statistical models that forecast the volume of crude oil production based on the historical production patterns. The models use Auto Regressive Integrated Moving Average (ARIMA) to analyze series of monthly crude oil production values collected over several years.

In order to provide detailed crude oil production information on both the PAD District level and for the major producing States, the total United States crude oil production volume was separated into nine distinct groupings. The nine different time series are the monthly reported crude oil production volumes for: (1) all the States in PAD District 1; (2) all the states in PAD District 2; (3) Texas; (4) Louisiana; (5) the States in PAD District 3 excluding Texas and Louisiana; (6) all the States in PAD District 4; (7) Alaska; (8) California; and (9) the States in PAD District 5 excluding Alaska and California. Monthly data collected beginning in January 1973 are used for each of these time series.

A separate ARIMA model is identified for each time series. New model parameters are estimated monthly for each of these nine updated time series. Then, these ARIMA models are used to forecast crude oil production volumes for the month of interest. These values are then aggregated into PAD District and national totals. The forecasts made during 1981 had an average error of less than 0.6 percent compared to the monthly crude oil production volumes eventually reported by the States.

Note 2.3 Disposition

The components of petroleum disposition are refinery input, exports, and products supplied for domestic consumption.

Refinery Inputs of crude oil, NGPL and other liquids are reported monthly on survey Form EIA-87, "Refinery Report." Published inputs of unfinished oils, and motor and aviation gasoline blending components, equal refinery input minus refinery output. Refinery inputs of finished petroleum products are reported on a net basis under refinery production. Refinery inputs are also reported weekly on survey Form EIA-161, "Refinery Report." See Explanatory Notes 1.2 and 1.3 for survey description and other details.

Exports of crude oil and petroleum products are compiled from Census Bureau tabulations EM522 and EM594. Exports include crude oil shipments to Puerto Rico, the Virgin Islands, and the Hawaiian Foreign Trade Zone, which are obtained from refinery receipts reported on Form EIA-87.

Product supplied for each product is calculated by summing field production plus refinery production, plus imports, plus stock withdrawal or minus stock addition, plus crude oil used directly and losses (plus net receipts when calculated on a PAD District basis), minus refinery input, minus exports. This formula ensures that total disposition equals total supply. Products supplied indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative when total disposition of that product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported, (2) misreporting or delayed reporting of data, and (3) for calculations on a PAD District basis, incomplete coverage of interdistrict movements data compiled to calculate net receipts.

Note 2.4 Stocks

Primary stocks of crude oil are the sum of ending stocks reported monthly on Form EIA-87, "Refinery Report," and Form EIA-90, "Crude Oil Stocks Report." Crude oil held in the Strategic Petroleum Reserve is included unless otherwise noted. Alaskan crude oil in transit is also included. Stocks of crude oil are also reported weekly on Form 161, "Refinery Report," and Form EIA-164, "Crude Oil Stocks Report." Primary stocks of petroleum products are summed from data reported on the Form EIA-64, "Natural Gas Liquids Operations Report," Form EIA-87, "Refinery Report," Form EIA-88, "Bulk Terminal Stocks Report," and Form EIA-89, "Pipeline Products Stocks Report." Primary stocks of petroleum products do not include secondary stocks held by dealers and jobbers, or stocks held by consumers. Petroleum product stocks are also reported weekly on Form EIA-161, "Refinery Report," Form EIA-162, "Bulk Terminal Stocks Report," and Form EIA-163, "Pipeline Products Stocks Report." For survey descriptions and other details see Explanatory Notes 1.1., 1.2, and 1.3.

Note 2.5 Average Stock Levels

The graphs displaying monthly stock levels of petroleum products, crude oil, motor gasoline, distillate fuel oil, residual fuel oil, liquified petroleum gases and ethane, and other products provide the user with recent data as well as a summary of data from the most recent 3 year period from January through December or from July through June. This summary takes the form of an "average range" that includes seasonal variation determined from a longer time period. The average range represents the historical pattern; it is not a forecast.

These curves are updated every 6 months effective January 1 or July 1 by basing the "average ranges" on a more recent time period. At that time, each 3-year data series will be adjusted by dropping the first 6 months and including the most recent 6 months.

For each data series, the monthly seasonal factors were estimated by means of a seasonal adjustment technique developed at the Bureau of Census (Census X-11). The seasonal factors were assumed to be stable (i.e., unchanging from year to year) and additive (i.e., the series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported stock levels). The intent of deseasonalization is to remove only seasonal variation from the data. Thus, a deseasonalized series would contain the same trends and irregularities as the original data. For crude oil stocks, the derived seasonal factors were very small relative to crude oil stock levels. Therefore, the seasonal factors for crude oil stock levels were set to zero. The seasonal factors for total petroleum (crude and products), distillate fuel oil, residual fuel oil, liquefied petroleum gases and ethane, and other products were derived using monthly data from 1974-1980. For motor gasoline, the seasonal factors were based on monthly data from 1975, 1976, 1978, 1979 and 1980. In 1977, there was virtually no seasonal behavior in motor gasoline stocks. Monthly stock levels stayed at the same high level for the entire year. In addition, the seasonal patterns in 1973 and 1974 appeared to be different from those in recent years. It was therefore assumed that the seasonal patterns in 1973, 1974, and 1977 were not representative of the recent past, and these years were not used in the determination of seasonal patterns for motor gasoline stocks. Because of these differences in the year-to-year seasonal fluctuation of motor gasoline, the evidence for the illustrated seasonal patterns for total petroleum (crude and products), crude oil, distillate fuel oil, residual fuel oil, liquefied petroleum gases and ethane, and other products is stronger than is the evidence for the illustrated seasonal patterns for motor gasoline.

In some cases, these seasonal patterns do not show a smooth transition from month to month. For example, the June factor for residual fuel oil is slightly less than the May and July values, making a bump in the curve. As there is little difference in the magnitude of these seasonal factors, it is possible that this variation is due to the small number of observations (7 years) and the data variability.

After seasonal factors are derived, the most recent 3 year period (from January through December or from July through June) is deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard error of the deseasonalized 36 months is calculated adjusting for extreme data points. The width of the "average range" is twice this standard error.

The upper curve of the "average range" is defined as the average plus the seasonal factors plus the standard error. The lower curve is defined as the average plus the seasonal factors minus the standard error.

Note 2.6 Movements

Movements of crude oil between PAD Districts are reported on Form EIA-170, "Tanker and Barge Report." Petroleum product movements are reported on Forms EIA-170 and EIA-89, "Pipeline Products Report." Net receipts are calculated by summing total movements into and total movements from each PAD District by pipelines, tankers, and barges, and subtracting for the difference. Movements of crude oil by pipeline are not reported. For survey descriptions and other detail, see Explanatory Notes 1.2 and 1.4.

Note 2.7 Preliminary Monthly Statistics

Data from the Weekly Petroleum Reporting System (Forms EIA-161, 162, 163, 164 and 165) are used to estimate the most recent monthly values for the historical statistics. Since some of the weekly reporting periods overlap 2 adjacent months, it is necessary to use weighting factors in the calculation of the monthly values.

To calculate monthly estimates of crude oil and petroleum product imports, crude oil input to refineries, and production of petroleum products for a specific month, the weekly estimates are weighted by the number of days of that month included in each week, then summed.

End-of-month stock levels of crude oil and the major products (motor gasoline, distillate fuel and residual fuel) are calculated in a similar manner, but use only the two weekly reporting periods that cover the end-of-week stocks before and after the end of the month. The end-of-month stock level is calculated by first calculating the stock change between the 2 weeks. The daily stock change between the two end-of-week stock levels is then calculated. This number is multiplied by the weighting factor of earlier of the 2 weeks (the week that covers the last day of the month of interest). This change is added to the earlier of the two end-of-week stock levels to estimate the end-of-month stock level.

Preliminary monthly estimates of domestic crude oil production are calculated as described in Explanatory Note 2.2.

Note 3 Accuracy of Petroleum Supply Data

Early in 1981, the Energy Information Administration completed an assessment of the accuracy of principal petroleum supply data series.¹ This assessment concentrated on two methods of analysis:

- Comparisons between EIA's final annual estimates published in the *Petroleum Statement Annual (PSA)* and annual estimates from independent sources.
- Comparisons between EIA's final monthly estimates published in the *PSA* and EIA's earlier estimates published in the *Monthly Petroleum Statistics Report* and the *Petroleum Statement, Monthly* (predecessor of the *Monthly Petroleum Statement*).

Selected excerpts from these comparisons are presented below.

Comparisons of Annual Estimates

All of the systems that provide data for the *Petroleum Supply Monthly*, except for the weekly systems, try to collect data from the entire universe of their potential respondents. They do not sample, and have no sampling errors. Inaccuracies in the data still occur because of problems such as incomplete lists of respondents, errors in the responses, and conceptual errors in the design of the data systems. Such inaccuracies are hard to identify and even harder to quantify. Some understanding of the overall accuracy of the estimates can be achieved by comparing estimates derived from independent sources of data, as shown in the following tables. Close agreements among annual estimates from several independent sources support the conclusion that the estimates are accurate, and accuracy in the annual estimates implies accuracy in the monthly estimates that comprise the annual estimates.

Crude Oil Production

Comparisons among independent estimates of annual crude oil and lease condensate production lead to the conclusion that the *PSA* estimates are probably accurate to within 1 percent.

Crude Oil Imports

Comparisons among independent estimates of annual crude oil imports lead to the conclusion that the *PSA* estimates are probably accurate to within 1 percent. This conclusion is supported by a study of EIA and Customs/Census import data performed for EIA.²

Motor Gasoline Supplied

Comparisons among independent estimates of the annual volume of motor gasoline supplied for domestic use show that differences in the estimates grew between 1977 and 1979. By 1979, the EIA estimate of sales by refiners and the Environmental Protection Agency's estimate of production had grown about 5-7 percent larger than the comparable *PSA*, Lundberg, and American Petroleum Institute (API) estimates. Research conducted by EIA in 1979 and 1980³ confirmed that the lower

¹*An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292, June 1981.

²Maxima Corporation, *Petroleum Imports Reporting Systems, Preliminary Draft*, (Silver Spring, Maryland: February 1980). Prepared for the Office of Energy Information Validation, Energy Information Administration, U.S. Department of Energy, Washington, D.C.

³Office of Energy Information Validation, *Energy Information Administration, U.S. Department of Energy, An Evaluation of Published EIA Gasoline Supply Estimates* (Washington, D.C.: April 1980).

estimates were inaccurate, and identified changes in the petroleum industry that had an adverse effect on the *PSA* estimate. During 1980, EIA developed and tested improved procedures for collecting petroleum supply data, and implemented them in January 1981. (See Explanatory Note 4.)

Distillate Fuel Oil Supplied

Comparisons among independent estimates of the annual volume of distillate fuel oil supplied for domestic use lead to the conclusion that the *PSA* estimates are probably accurate to within 1 to 2 percent.

Residual Fuel Oil Supplied

Comparisons among independent estimates of the annual volume of residual fuel oil supplied for domestic use seem to show sizable and consistent differences between the EIA estimates of sales by refiners and the *PSA* and API estimates. When imports of residual fuel oil by nonrefiners are added to the refiner sales, however, the difference between refiner sales and the *PSA* estimates are narrowed to within 1 percent. The comparisons therefore lead to the conclusion that the *PSA* estimates are probably accurate to within 1 to 2 percent.

Comparison of Estimates of the Volume of Crude Oil and Lease Condensate Production, 1977-1979

	Estimated Volume of Production in Millions of 42-U.S. Gallon Barrels ^a			Comparative Estimate as a Percent of the <i>PSA</i> Estimate		
	1979	1978	1977	1979	1978	1977
EIA Estimate from Petroleum Statement Annual ^b	3,121	3,178	3,009	///	///	///
<u>Comparative Estimates</u>						
American Petroleum Institute Estimate from API Monthly Statistical Report ^c	3,130	3,214	3,021	100.3%	101.1%	100.4%
Census Estimate from the Annual Survey of Oil and Gas ^d	—	3,148	3,016	—	99.1%	100.2%
Oil and Gas Journal Estimates ^e of Total Production derived from Monthly Data	3,168	3,165	3,005	101.5%	99.6%	99.9%
EIA Estimate from Annual Survey of Oil and Gas Reserves (EIA-23) ^f	3,102	3,144	3,001	99.4%	98.9%	99.7%

/// = Not applicable

— = Not available

^aVolumes are rounded to the nearest million barrels.

^bFrom Table 6 in EIA's *Petroleum Statement Annual*, 1977, 1978, 1979.

^cFrom issues of the American Petroleum Institute's *Monthly Statistical Report*. The annual values were obtained by summing the monthly values for each of the twelve-month periods.

^dFrom Table 1, p.2 of the Bureau of Census' *Annual Survey of Oil and Gas*, 1978.

^eFrom issues of the *Oil and Gas Journal*. Monthly estimates are in thousands of barrels per day. They are converted to millions of barrels by dividing by 1,000 and multiplying by the number of days in the reporting period.

^fFrom EIA's *U.S. Crude Oil and Natural Gas Reserves 1979 Annual Report* (Table 19, p. 33), *1978 Annual Report* (Table 16, p. 20), and *1977 Annual Report* (Table 22, p.36).

Geographic coverage: the 50 United States and District of Columbia with adjacent areas of the Outer Continental shelf.

SOURCE: *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292.

Comparison of Estimates of the Volume of Crude Oil Imports, 1977-1979

	Volume of Millions of 42-U.S. Gallon Barrels ^a			Comparative Estimates as a Percent of the Primary Estimate		
	1979	1978	1977	1979	1978	1977
EIA Estimate of Receipts at Ports of Entry (ERA-60) from <i>Petroleum Statement, Annual</i> ^b	2,380	2,320	2,414	///	///	///
<u>Comparative Estimates</u>						
American Petroleum Institute Estimate of Receipts as Reported by Refiners ^c	2,346	2,323	2,360	98.6%	100.1%	97.8%
Customs/Census Estimate of Receipts at Ports of Entry (Customs Forms 7501 and 7502) ^d	2,415	2,338	2,431	101.5%	100.8%	100.7%
EIA Estimate of Inputs of Foreign Crude at Refineries (ETA-87) ^e	2,364	2,334	2,431	99.3%	100.6%	100.7%

/// = Not applicable

^aVolumes are rounded to the nearest million barrels.

^bFrom Table 1 in EIA's *Petroleum Statement Annual* 1977, 1978, 1979. This table also includes imports for the Strategic Petroleum Reserve (SPR) which were 7.5 million in 1977, 58.8 million in 1978, and 24.4 million in 1979.

^cEstimate equals the sum of the annual estimate of imports derived from API's *Monthly Statistics Report* (which excludes imports for SPR), and the EIA estimates for imports for the SPR which are listed in footnote b above. The annual estimates from API data are equal to the sum of the API monthly estimates weighted by the number of days in each month.

^dData on imports to Puerto Rico which are included in the source for these estimates have been excluded from these estimates in keeping with the geographic coverage of the table. Data are from computer printouts of the Bureau of Census Report IM-245-X dated April 3, 1980 (1977 and 1978 data) and December 19, 1980 (1979 data).

^eEstimate equals refinery inputs of foreign crude plus (minus) stock increases (decreases) of foreign crude. The data for the computation are published in EIA's *Petroleum Statement, Annuals*. The stock changes (all increases) are derived from data on stocks of crude oil at refineries, bulk terminals, and pipelines as reported on Form EIA-90, plus the increase in the SPR. This estimate excludes crude oil imported and not used as refinery input.

Geographic coverage: the 50 United States and the District of Columbia.

SOURCE: *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292.

Comparison of Estimates of the Volume of Motor Gasoline Supplied for Domestic Use, 1977-1979

	Volume in Millions of 42-U.S. Gallon Barrels ^a			Volume Supplied as a Percent of the PSA Estimate		
	1979	1978	1977	1979	1978	1977
EIA Estimate from <i>Petroleum Statement, Annual</i> ^b	2,573	2,711	2,625	///	///	///
<u>Comparative Estimates</u>						
EIA Estimate of Sales by Refiners (P-306) ^c	2,708	2,792	2,671	105.2%	103.0%	101.8%
Environmental Protection Agency Estimate derived from Production Data ^d	2,766	2,851	2,706	107.5%	105.2%	103.1%
Lundberg Surveys, Inc. Estimate of U.S. Motor Gasoline Sales ^e	2,631	2,746	2,656	102.3%	101.3%	101.2%
American Petroleum Institute Estimate of Deliveries ^f	2,579	2,697	2,612	100.2%	99.5%	99.5%

/// = Not applicable

^aVolumes are rounded to the nearest million 42-U.S. gallon barrels.

^bDerived from Table 2 in EIA's *Petroleum Statement Annual*, 1977, 1978, 1979.

^cDerived from Table 1 of EIA's December issue of *Petroleum Market Shares, Report on Sales of Refined Petroleum Products* 1977, 1978, 1979.

^dThe estimate shown is derived by substituting EIA Domestic Production values with values of domestic production tabulated from the Environmental Protection Agency Bq. Form 3520-2, "Lead Additive Report for Refineries." The EPA production estimates are 2,694 million barrels in 1977, 2,757 in 1978, and 2,648 in 1979 as compared from a summary sheet provided by Mr. Bob Summerhayes of EPA.

^eFrom the mid-June issues of the "National Petroleum News," 1979 and 1980.

^fAPI publishes monthly estimates in thousands of barrels per month of the volume of motor gasoline delivered from primary storage. The initial published monthly estimate is derived from API sources, but in later API publications the estimates are revised using EIA data. The values shown in the table are equal to the sums of the initial published API monthly estimates of motor gasoline multiplied by the number of days per month.

Geographic coverage: the 50 United States and the District of Columbia.

SOURCE: *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292.

Comparison of Estimates of the Volume of Distillate Fuel Oil (Including Kerosene) Supplied for Domestic Use, 1977-1979

	Volume in Millions of 42-U.S. Gallon Barrels ^a			Volume Supplied as a Percent of the PSA Estimate		
	1979	1978	1977	1979	1978	1977
EIA Estimate from <i>Petroleum Statement Annual</i> ^b	1,269	1,307	1,275	///	///	///
<u>Comparative Estimates</u>						
EIA Estimate of Sales by Refiners (P-306) ^c	1,282	1,275	1,242	101.0%	97.6%	97.4%
American Petroleum Institute Estimate of Deliveries ^d	1,291	1,300	1,277	101.7%	99.5%	100.2%

/// = Not applicable

^aVolumes are rounded to the nearest million 42-U.S. gallon barrels.

^bDerived from Table 2 in EIA's "Petroleum Statement Annual", 1977, 1978, 1979.

^cDerived from Table 1 of EIA's December issue of *Petroleum Market Shares, Report on Sales of Refined Petroleum Products*, 1977, 1978, 1979.

^dAPI publishes monthly estimates in thousands of barrels per month of the volume of distillate and kerosene delivered from primary storage. The initial published monthly estimate is derived from API sources, but in later API publications the estimates are revised using EIA data. The values shown in the table are equal to the sums of the initial published API monthly estimates of distillate and kerosene multiplied by the number of days per month.

Geographic coverage: the 50 United States and the District of Columbia.

SOURCE: *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292.

Comparison of Estimates of the Volume of Residual Fuel Oil Supplied for Domestic Use, 1977-1979.

	Volume in Millions of 42-U.S. Gallon Barrels ^a			Volume Supplied as a Percent of the PSA Estimates		
	1979	1978	1977	1979	1978	1977
EIA Estimate from <i>Petroleum Statement, Annual</i> ^b	1,024	1,095	1,109	///	///	///
Comparative Estimates						
EIA Estimate of Sales by Refiners (P-306) ^c	796	832	847	80.8%	79.6%	80.1%
American Petroleum Institute Estimate of Deliveries ^d	1,044	1,101	1,114	102.0%	100.5%	100.4%

/// = Not Applicable

^aVolumes are rounded to the nearest million 42-U.S. gallon barrels.

^bDerived From Table 2 in EIA's *Petroleum Statement Annual*, 1977, 1978, 1979. Refinery fuel use, subtracted from the figures in the source referenced below, has been reinstated in these estimates.

^cDerived from Table 1 of EIA's December issue of *Petroleum Market Shares, Report on Sales of Refined Petroleum Products*, 1977, 1978, 1979.

^dAPI publishes monthly estimates in thousands of barrels per month of the volume of residual fuel oil delivered from primary storage. The initial published monthly estimate is derived from API sources, but in later API publications the estimates are revised using EIA data. The values shown in the table are equal to the sums of the initial published API monthly estimates of residual fuel oil multiplied by the number of days per month.

Geographic Coverage: the 50 United States and the District of Columbia.

SOURCE: *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292.

Comparisons of Monthly Estimates Over Time

Inaccuracies in petroleum data resulting from incomplete or delayed reports from respondents and from data processing errors are usually eliminated from the final PSA estimates. Such inaccuracies can still have important effects on the monthly estimates published in the *Petroleum Supply Monthly* and its predecessors. The following tables compare the initial monthly estimates published in the *Monthly Petroleum Statistics Report* and the *Petroleum Statement, Monthly* with the final monthly estimates published in the PSA. During 1977 - 1979, the *Monthly Petroleum Statistics Report* was published about 60 days after the end of the reporting month, and the *Petroleum Statement, Monthly* was published about 120-150 days after the end of the reporting month. The tables show that, both in terms of bias and in terms of standard deviation, the later estimates are consistently more accurate than the earlier estimates. In spite of this, the earlier estimates may have been more valuable to users of energy information because of the large difference in timeliness.

For purposes of comparison, the *Petroleum Supply Monthly* is scheduled to be published on about the same time lag as the *Monthly Petroleum Statistics Report*. Caution should be exercised, however, in drawing conclusions from this similarity. The *Petroleum Supply Monthly* uses improved data processing procedures developed and successfully implemented during 1981. In addition, since 1979 EIA has greatly improved the accuracy of its 60-day crude oil production estimates and is making progress in improving the accuracy of its 60-day import estimates.

**Initial Monthly Estimates of Production, Stocks, and Imports of Crude Oil As A Percent of EIA's Final Published Estimates ^a
January 1977 - December 1979**

	<u>Production During Month</u>		<u>Primary Stocks At End of Month</u>		<u>Imports During Month</u>	
	Mean Percent	Standard Deviation	Mean Percent	Standard Deviation	Mean Percent	Standard Deviation
EIA's Estimates from the <i>Monthly Petroleum Statistics Report</i> ^b	# 98.7%	1.6%	# 98.3%	1.4%	# 95.4%	2.4%
EIA's Estimates from the <i>Petroleum Statement, Monthly</i> ^c	# 99.6%	0.6%	100.0%	0.1%	# 98.4%	1.3%

**Initial Monthly Estimates of Products Supplied for Domestic Use as A Percent of EIA's Final Published Estimates ^a
January 1977 - December 1979**

	<u>Motor Gasoline</u>		<u>Distillate Fuel Oil</u>		<u>Residual Fuel Oil</u>	
	Mean Percent	Standard Deviation	Mean Percent	Standard Deviation	Mean Percent	Standard Deviation
EIA's Estimates from the <i>Monthly Petroleum Statistics Report</i> ^b	99.9%	1.3%	99.9%	2.3%	# 97.9%	2.7%
EIA's Estimates from the <i>Petroleum Statement, Monthly</i> ^c	100.0%	0.3%	99.7%	0.5%	99.4%	1.2%

**Initial Monthly Estimates of End-of-Month Primary Stocks As a Percent of EIA's Final Published Estimates ^a
January 1977 - December 1979**

	<u>Motor Gasoline</u>		<u>Distillate Fuel Oil</u>		<u>Residual Fuel Oil</u>	
	Mean Percent	Standard Deviation	Mean Percent	Standard Deviation	Mean Percent	Standard Deviation
EIA's Estimates from the <i>Monthly Petroleum Statistics Report</i> ^b	99.7%	0.8%	99.7%	1.1%	100.1%	0.7%
EIA's Estimates from the <i>Petroleum Statement, Monthly</i> ^c	99.9%	0.2%	100.0%	0.1%	100.1%	0.5%

Represents a difference from 100% found to be statistically significant at the 95% level of confidence (n = 36).

^aFinal monthly estimates are from the "Petroleum Statement, Annual" for 1977, 1978 and 1979. The mean percent is calculated as follows: each preliminary estimate is first expressed as a percent of EIA's final published estimate, these are then summed and the sum is divided by the number of estimates. The standard deviation is the square root of the quantity computed by summing the squared deviation of the percents from the mean percent and then dividing by the number of percents.

^bBased on 36 initial estimates appearing in issues dated January 1977 - December 1979.

^cBased on 36 initial estimates appearing in issues dated January 1977 - December 1979.

SOURCE: *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292.

Note 4 Changes in Petroleum Industry Reporting

Petroleum statistics contained in this report for all years through 1980 were developed using definitions, concepts, reporting procedures and aggregation methods that are consistent with those developed by the U.S. Bureau of Mines. Research conducted by the Energy Information Administration in 1979 and 1980 indicated that changes had occurred in the petroleum industry that were not being adequately reflected in EIA's reporting systems.

EIA reporting forms, definitions, and procedures were modified beginning in January 1981 to describe industry operations more accurately. Unfortunately, empirical information is not available to precisely measure the data shortcomings throughout 1980. However, estimates of the magnitudes of differences in the major data series are described below to form a basis for comparing 1979, 1980, and 1981 data.

Motor Gasoline

Prior to 1979, the EIA product-supplied series for motor gasoline was consistently about 2 percent lower than the Federal Highway Administration (FHWA) gasoline-sales data series, which is derived from State tax receipts. This difference increased to about 4 percent in 1979 and 5 percent in 1980. There are two primary causes for this growing difference. First, refinery operations, particularly the flows of unfinished oils and the redesignation of some finished products, were not being accurately described on the EIA survey forms. Second, a large amount of gasoline was being produced away from refineries at "downstream blending stations" to take advantage of provisions in regulations governing the amount of lead that could be added. These blending stations were not reporting gasoline production to the EIA until the data system was changed in January 1981.

Quantitative estimates of the magnitude of the difference—in EIA's gasoline product supplied data in 1979 and 1980 have been made by the EIA and the American Petroleum Institute (API). The following table provides 1979 and 1980 data as published in the *Petroleum Statement Annual*, as well as EIA and API estimates of "recast" motor gasoline product supplied. EIA recast estimates were based upon preliminary monthly information in the *Monthly Petroleum Statement*. The ranges displayed in the EIA column reflect uncertainty in the estimates. Also shown are the FHWA motor gasoline sales statistics for those years. EIA has recently published a study of the quality of these FHWA data.¹

¹Office of Energy Information Validation, Energy Information Administration, U.S. Department of Energy, *Error Profile of the Motor Fuel Taxation Data used to Establish and Monitor State Emergency Conservation Targets* (Washington, D.C.: December, 1981).

**Finished Motor Gasoline Product Supplied on Old and New Basis
(Thousand Barrels per Day)**

	1979				1980			
	EIA Reported	API Recast	EIA Recast	FHWA ¹	EIA Reported	API Recast	EIA Recast	FHWA ¹
Jan	6,830	7,230	7,084- 7,246	6,984	6,323	6,789	6,630- 6,791	6,672
Feb	7,254	7,496	7,389- 7,568	7,538	6,596	6,983	6,831- 7,003	6,830
Mar	7,229	7,414	7,301- 7,463	7,316	6,406	6,753	6,607- 6,768	6,713
Apr	7,055	7,300	7,187- 7,353	7,375	6,800	7,014	6,886- 7,052	6,981
May	7,213	7,429	7,313- 7,475	7,428	6,729	6,954	6,823- 6,984	7,044
Jun	7,191	7,483	7,350- 7,516	7,441	6,657	6,966	6,824- 6,991	7,049
Jul	6,902	7,241	7,105- 7,266	7,299	6,743	6,973	6,960	7,132
Aug	7,330	7,546	7,426- 7,588	7,619	6,648	6,841	6,828	7,090
Sep	6,881	7,122	7,016- 7,262	7,232	6,510	6,692	6,962	6,685
Nov	6,791	7,068	6,956- 7,122	7,142	6,234	6,507	6,516	6,951
Dec	6,730	7,106	6,966- 7,127	7,064	6,632	6,948	6,936	6,993
Average	7,034	7,302	7,183- 7,347	7,309	6,579	6,882	6,806- 6,889	6,925

¹FHWA gasoline statistics published in their 1979 Table MF-33G, 08-06-80, contain aviation gasoline as well as motor gasoline. Only motor gasoline data are included in published 1980 data. Consequently, the 1979 data shown above were reduced by subtracting aviation gasoline product supplied quantities as published by EIA in the 1979 *Petroleum Statement Annual*. The 1980 FHWA data published in their 1980 Table MF-33GA, August 1981, did not require this adjustment.

Distillate and Residual Fuel Oil

Distillate and residual fuel oil refinery production statistics through 1980 were adjusted to account for an imbalance between unfinished oil supply and disposition. The reported quantities of refinery inputs of unfinished oils typically exceed the available supply of unfinished oils. It has been assumed that this occurs when distillate and residual fuel oil produced by a refinery is shipped to another refinery, where it is treated as unfinished oil. This oil is then reprocessed rather than used or sold as distillate or residual fuel oil.

For many years (including 1980), the difference between unfinished oil disposition and supply was subtracted from distillate and residual fuel oil production to adjust for this discrepancy. Two-thirds of the difference was applied to distillate, and one-third to residual fuel oil.

Beginning in January 1981 this adjustment was discontinued because there was not sufficient empirical evidence to support it. The following table presents distillate and residual fuel oil refinery production in 1980 as published (adjusted) and on the same basis as 1981 statistics are now being completed (unadjusted) to permit comparison between 1980 and 1981 data series. Adjusted distillate and residual fuel oil product supplied volumes differ from the unadjusted volumes by the same amounts as the adjusted and unadjusted production volumes.

Adjusted and Unadjusted Refinery Production, and Unadjusted Product Supplied of Distillate and Residual Fuel Oils, by Month for 1979 and 1980 (Thousand Barrels Per Day)

1979

Month	Distillate Fuel Oil				Residual Fuel Oil			
	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied
Jan.	3,043	3,108	65	4,646	1,912	1,946	34	3,594
Feb.	2,888	2,945	57	4,869	1,792	1,822	30	3,625
Mar.	3,019	3,026	7	3,671	1,719	1,723	4	3,243
Apr.	2,945	2,978	32	3,048	1,639	1,656	17	2,524
May	3,066	3,093	27	3,025	1,586	1,600	14	2,517
Jun.	3,153	3,187	35	2,743	1,548	1,566	18	2,601
Jul.	3,305	3,344	38	2,601	1,575	1,594	20	2,471
Aug.	3,321	3,359	38	2,799	1,584	1,603	20	2,570
Sep.	3,354	3,306	-48	2,599	1,627	1,602	-25	2,584
Oct.	3,251	3,217	-34	3,085	1,629	1,612	-17	2,523
Nov.	3,239	3,200	-39	3,208	1,736	1,716	-20	2,795
Dec.	3,221	3,238	17	3,725	1,894	1,903	9	3,022
Average	3,152	3,169	16	3,327	1,687	1,695	8	2,834

1980

Month	Distillate Fuel Oil				Residual Fuel Oil			
	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied
Jan.	3,013	3,093	80	3,794	1,771	1,812	41	3,108
Feb.	2,766	2,888	122	3,834	1,773	1,836	63	3,168
Mar.	2,557	2,690	133	3,312	1,584	1,652	68	2,726
Apr.	2,460	2,554	94	2,729	1,595	1,643	48	2,492
May	2,474	2,610	136	2,538	1,509	1,579	70	2,305
Jun.	2,646	2,721	75	2,392	1,575	1,613	38	2,359
Jul.	2,689	2,783	94	2,343	1,480	1,528	48	2,339
Aug.	2,461	2,582	121	2,258	1,444	1,506	62	2,348
Sep.	2,686	2,726	40	2,627	1,495	1,516	21	2,380
Oct.	2,589	2,650	61	2,981	1,512	1,543	31	2,258
Nov.	2,703	2,823	120	3,069	1,579	1,641	62	2,513
Dec.	2,891	3,052	161	3,776	1,660	1,743	83	2,762
Average	2,661	2,764	103	2,969	1,580	1,634	54	2,562

Total Petroleum Products

The imbalance between the supply and disposition of unfinished oils is now reported as part of the reclassified products (line 39) in the U.S. Petroleum Balance (Table 1). Imbalances between the supply and disposition of gasoline blending components comprise the remainder of the reclassified in Table 1. These imbalances are reported as negative product supplied in the Other Liquids section of the table. Supply and Disposition Statistics (Table 2). Since these changes only involve redistribution of the volumes of gasoline, distillate and residual fuel oil, gasoline blending components, and unfinished oil, the total volume of petroleum products supplied remains unaffected by them.

Note 5 Notes on Tables

5.1 Crude Oil and Petroleum Products Overview statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Crude Oil and Petroleum Products Stock Withdrawal (+) or Addition (-), Petroleum Products Supplied, Total Imports, Crude Oil Imports, Total Exports, and Crude Oil Exports appear as labeled in Table 4. Total Production and Crude Oil Production appear under Field Production in Table 4.

- Natural Gas Plant Production is the sum of Natural Gas Plant Liquids and Finished Petroleum Products Field Production in Table 4.

- Petroleum Products Imports is the sum of Natural Gas Plant Liquids and LRGs, Other Liquids, and Finished Petroleum Products Imports in Table 4.

- Petroleum Products Exports is the sum of Natural Gas Plant Liquids and LRGs, Other Liquids, and Finished Petroleum Products Exports in Table 4.

- Total Crude Oil and Petroleum Products Ending Stocks appear in thousands of barrels in Table 2.

5.2 Crude Oil Supply and Disposition statistics on the referenced line appear in Table 1 of the Detailed Statistics, except where noted.

- Total Domestic Field Production, Alaskan Field Production, SPR Imports, Other Imports (synonymous with Imports Gross Excl. SPR), SPR and Other Primary Stocks Withdrawal (+) or Addition (-), Unaccounted For Crude Oil, Refinery Inputs, and Exports appear as labeled in Table 1.

- SPR Ending Stocks and Other Primary Ending Stocks (synonymous with stocks excluding SPR) appear in thousands of barrels in Table 1.

- Total Crude Oil Ending Stocks appear in thousands of barrels in Table 2.

- Total Imports appear in Table 4.

5.3 Finished Motor Gasoline Supply and Disposition statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Unleaded Percent of Total Product Supplied represents the ratio of finished unleaded motor gasoline product supplied to total finished motor gasoline product supplied, multiplied by 100 and rounded to the nearest tenth.

- Ending Stocks appear in thousands of barrels in Table 2.

5.4 Distillate and Residual Fuel Oil Supply and Disposition statistics on the referenced lines appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Crude Used Directly, Exports, and Product Supplied appear as labeled in Table 4.

- Ending Stocks appear in thousands of barrels in Table 2.

5.5 Liquefied Petroleum Gases and Ethane statistics represent the aggregation of statistics on ethane, propane, butane, butane-propane mixtures, ethane-propane mixtures, and isobutane. The statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.
- Imports, Stock Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied appear as labeled in Table 4.
- Ending stocks appear in thousands of barrels in Table 2.

5.6 Other Petroleum Products Supply and Disposition statistics represent the aggregation of statistics on natural gasoline, isopentane, unfractionated stream, plant condensate, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, and residual fuel oil. The statistics on the referenced line are aggregated from Table 4 of the Detailed Statistics, except where noted.

- Total Production is the aggregated sum of Field Production and Refinery Production in Table 4.
- Imports, Stock Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied are aggregated from Table 4.
- Ending stocks are aggregated from ending stocks in thousands of barrels in Table 2.

Note 5.7 Table 1. U.S. Petroleum Balance

- Lines (1) through (3) of Table 1: Crude oil (including lease condensate) production for "Alaska," "Lower 48 States," and "Total U.S." are calculated by calling the conservation agency in Alaska for Alaskan crude oil production during the month, estimating crude oil production in the United States (see Explanatory Note 2.2), and taking the difference to equal production in the lower 48 states.
- Line (5) of Table 1: SPR imports are reported on Survey Form ERA-60.
- Line (12) of Table 1: "Total Other Sources" equals crude oil stock withdrawal (+) or addition (-) plus unaccounted for crude oil plus crude used as fuel and losses in Table 2.
- Line (14) of Table 1: Natural gas plant liquids (NGPL) "Production" equals field production of natural gas plant liquids (NGPL) plus field production of finished petroleum products in Table 2.
- Line (15) of Table 1: NGPL "Imports" equals the sum of the imports of natural gasoline and isopentane, unfractionated stream, and plant condensate imports in Table 2.
- Line (16) of Table 1: NGPL "Stock Withdrawal (+) or Addition (-)" is equal to the sum of stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate in Table 2.
- Line (17) of Table 1 equals the sum of lines (14), (15), and (16) of Table 1.
- Line (18) of Table 1: unfinished oils and gasoline blending components "Stock Withdrawal (+) or Addition (-)" equals stock withdrawal (+) or addition (-) for other hydrocarbons and alcohol, for unfinished oils, motor gasoline blending components, and aviation gasoline blending components.
- Line (20) of Table 1: "Other Hydrocarbons and Alcohol New Supply" equals the field production of same in Table 2.
- Line (21) on Table 1: "Refinery Processing Gain" is a balancing item equal to total refinery production minus total refinery input in Table 2.
- Line (22) on Table 1: "Crude Used Directly" equals the sum of crude oil used directly as distillate and residual fuel oils in Table 2.
- Line (23) of Table 1: "Total Other Liquids" equals the sum of lines (18) through (22) of Table 1.
- Line (24) of Table 1: "Total Production of Products" equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or

addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; plus crude oil used as distillate and residual fuel oils in Table 2.

- Line (25) of Table 1: "Gross Imports of Refined Products" equals imports of LPG and ethane plus imports of finished petroleum products in Table 2.

- Line (26) of Table 1: "Exports of Refined Products" equals exports of LPG and ethane plus exports of finished petroleum products in Table 2.

- Line (27) of Table 1: "Net Imports of Refined Products" equals the difference between lines (25) and (26) of Table (1).

- Line (28) of Table 1: "Total New Supply of Products" equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; plus crude oil used as distillate and residual fuel oils; plus imports of LPG and ethane and finished petroleum products; minus exports of LPG and ethane and finished petroleum products in Table 2.

- Line (29) of Table 1: "Refined Products Stocks Withdrawal (+) or Addition (-)" equals the sum of stock withdrawal (+) or addition (-) for LPG and ethane, and finished petroleum products in Table 2.

- Line (30) of Table 1: "Total Petroleum Products Supplied for Domestic Use" equals total products supplied in Table 2.

- Lines (31) through (37) of Table 1 equal the respective products supplied in Table 2.

- Line (38) of Table 1: "Other Products Supplied" equals the sum of natural gasoline and isopentane, unfractionated stream, plant condensate, aviation gasoline, naphtha < 400 Deg. F for petrochemical feedstock uses, other oils > 400 Deg. F. for petrochemical feedstock use, special naphthas, lubricants, waxes, coke, asphalt, road oil, still gas, and miscellaneous products supplied in Table 2.

- Line (39) of Table 1: "Total Reclassified" is a balancing item equal to the sum of unfinished oils, motor gasoline blending components, and aviation gasoline blending components products supplied in Table 2.

- Line (40) of Table 1: "Total Product Supplied" is equal to total products supplied in Table 2.

- The sum of lines (41) and (42) of Table 1, stocks of "Crude Oil and Lease Condensate (Excluding SPR)" and stocks held by the "Strategic Petroleum Reserve," equals ending stocks of crude oil in Table 2. SPR stocks are reported on Form EIA-90.

- Line (46) of Table 1, stocks of "Refined Products," equals the sum of LPG and ethane and finished petroleum product stocks in Table 2.

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry, no matter how small, should be recorded to ensure the integrity of the financial data. This includes not only sales and purchases but also expenses and income. The document further states that regular reconciliation of accounts is essential to identify any discrepancies early on and prevent them from escalating into larger issues.

In the second section, the focus shifts to the role of technology in modern accounting. It highlights how software solutions have revolutionized the way businesses manage their finances. From automated data entry to real-time reporting, technology has made accounting more efficient and less prone to human error. However, it also notes that while technology is a powerful tool, it cannot replace the need for skilled professionals who can interpret the data and provide strategic advice.

The third part of the document addresses the challenges faced by small businesses in the current economic climate. It points out that many small enterprises are struggling due to increased competition and fluctuating market conditions. To survive and thrive, these businesses must adopt a proactive approach to financial management. This involves creating a solid budget, monitoring cash flow closely, and exploring various financing options when needed. The document concludes by encouraging business owners to stay informed about market trends and to seek professional advice when necessary.

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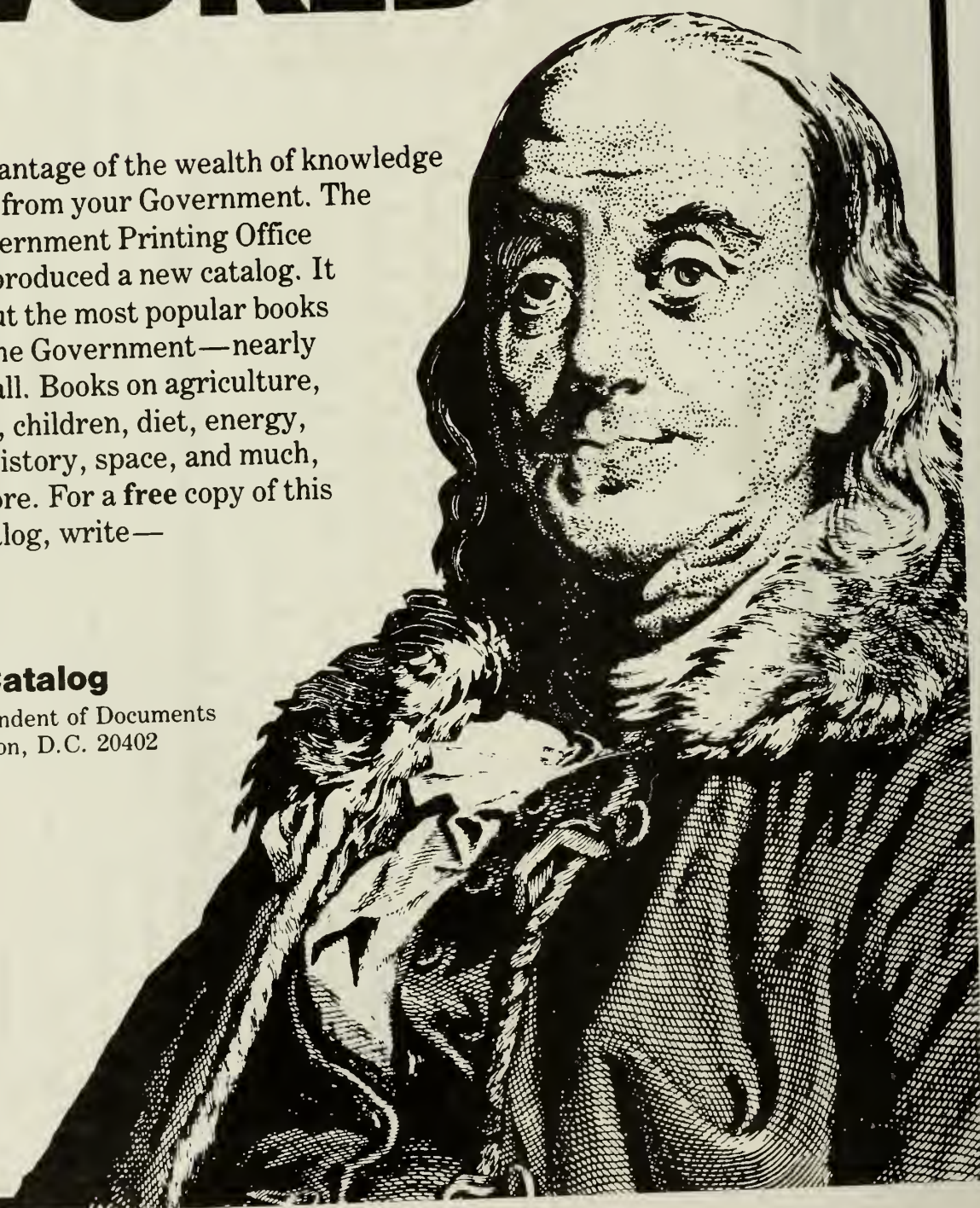
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Petroleum Supply Monthly



March 1983



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Petroleum Supply Monthly



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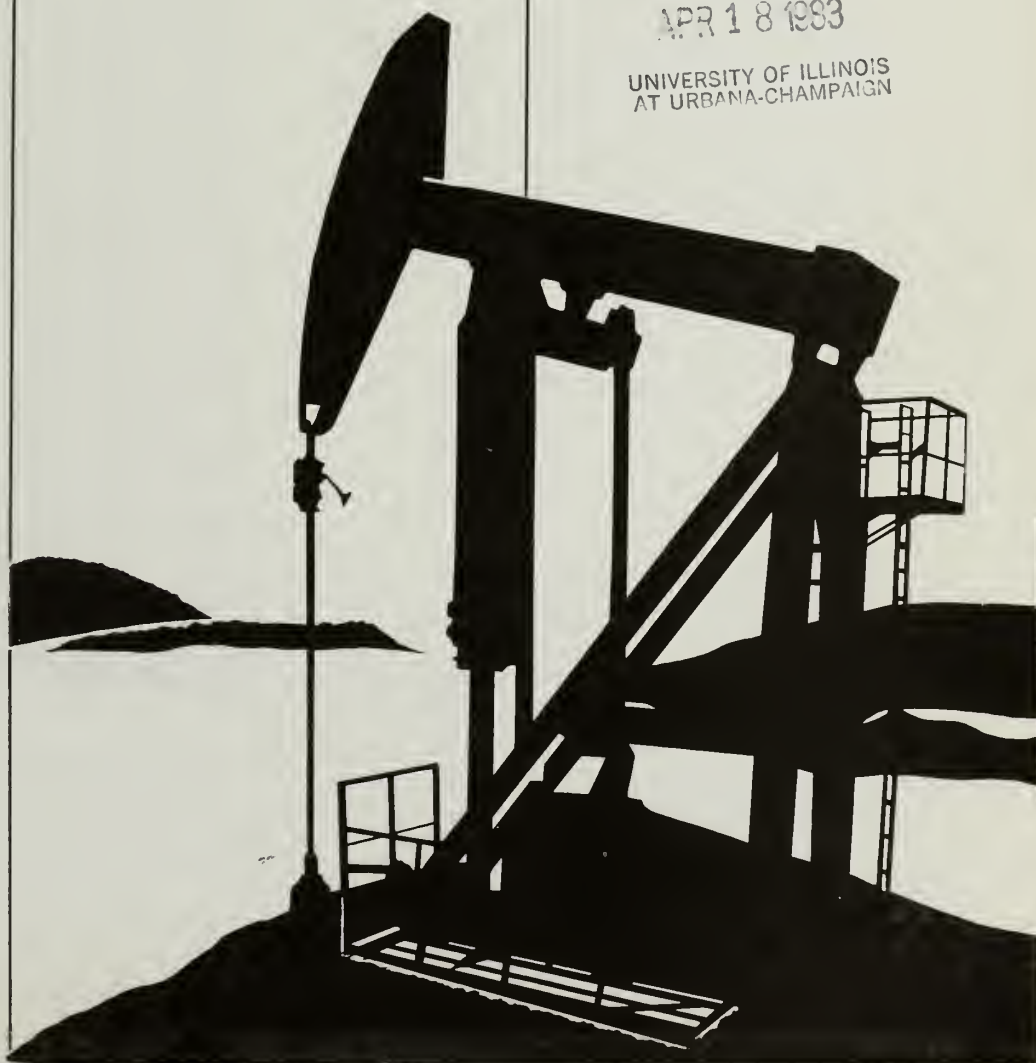
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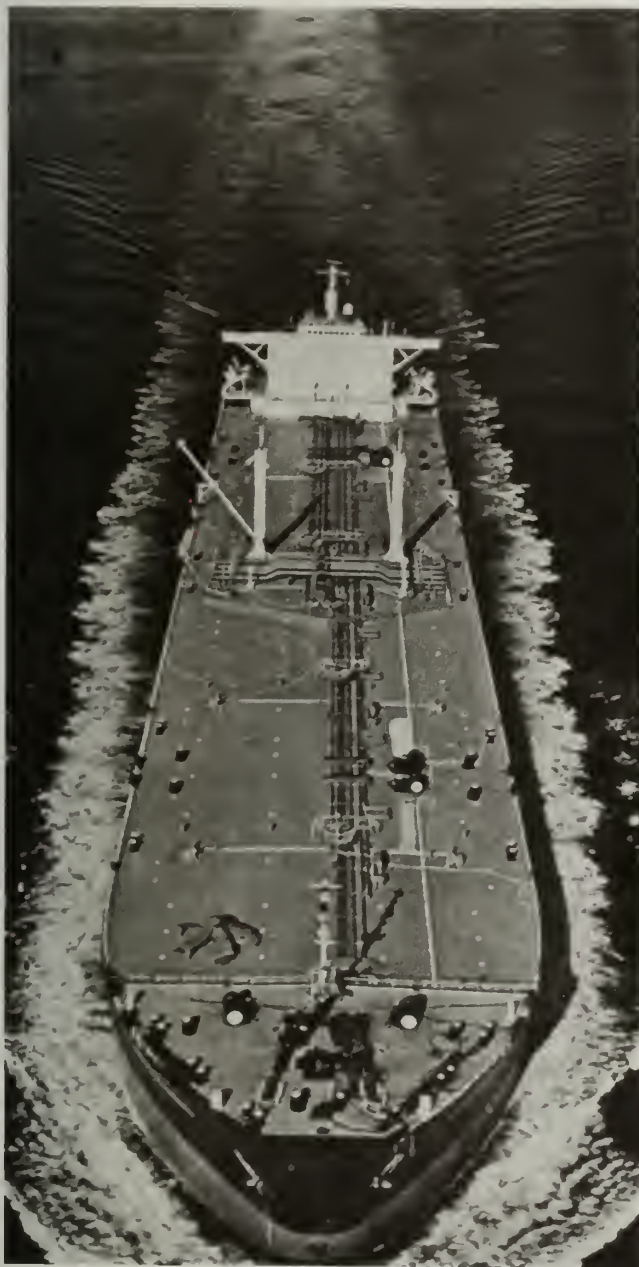




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This Month in the PSM

January 1983 marked the implementation of changes in the collection, processing and availability of the Energy Information Administration's petroleum supply data. This month's *Petroleum Supply Monthly* reflects those changes. A detailed explanation of those changes can be found in this month's feature article, *Petroleum Supply Reporting System Overview*, starting on page 6.



A new table, *Movements of Residual Fuel Oil by Tanker and Barge Between PAD Districts, by Sulfur Level* (Table 27) is one of the many changes appearing in this month's PSM.

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Introduction

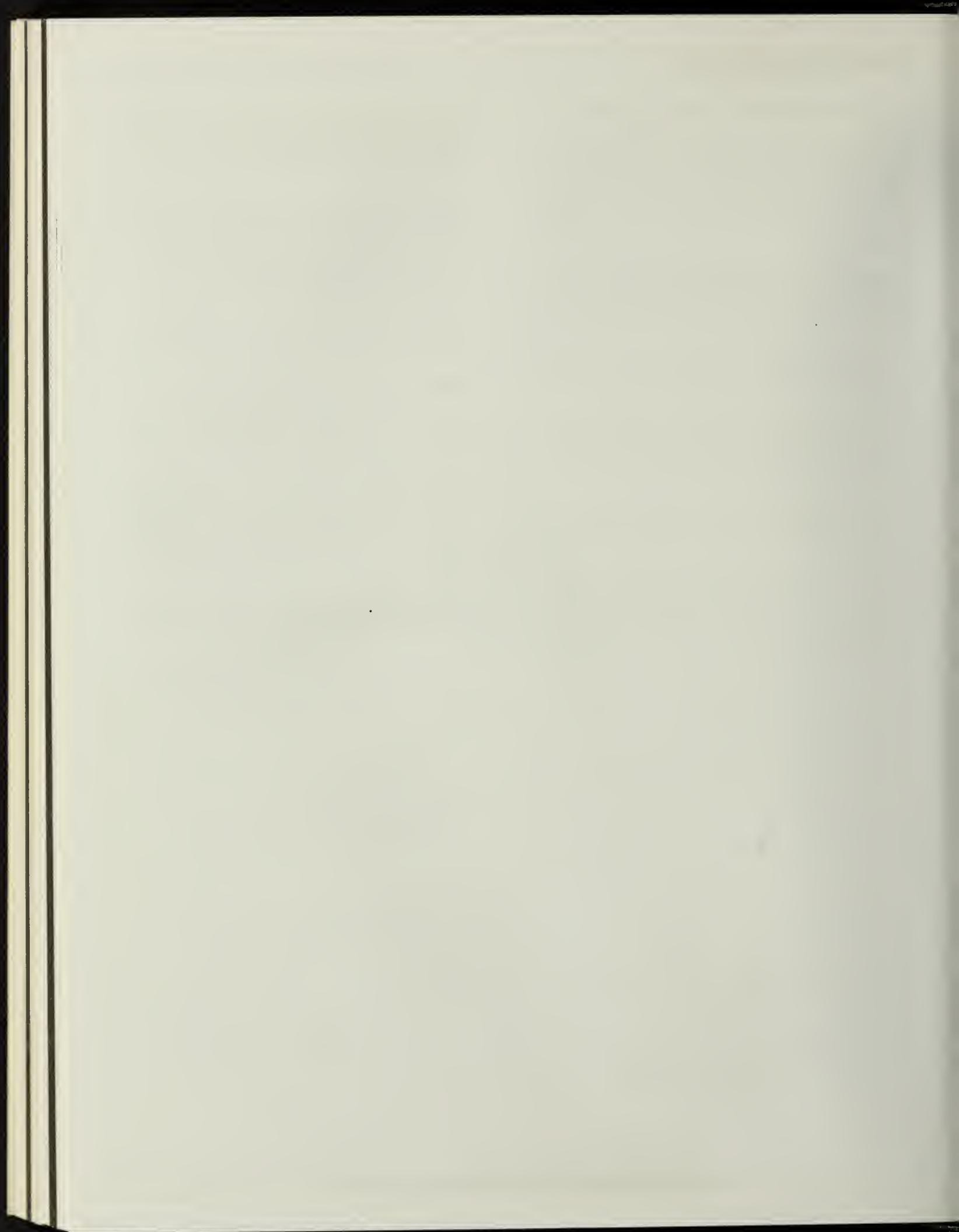
Changes in the Petroleum Supply Monthly

Beginning with this issue, the *Petroleum Supply Monthly (PSM)* has been changed to incorporate revisions to the survey data collected for this report. These data collection forms, making up the Petroleum Supply Reporting System (PSRS), were revised and consolidated in order to reduce respondent burden and to improve consistency among the various EIA data collection instruments.

The detailed tables have been simplified due to the reduction in product and geographic detail collected in the survey process. The following are the most significant changes to the tables:

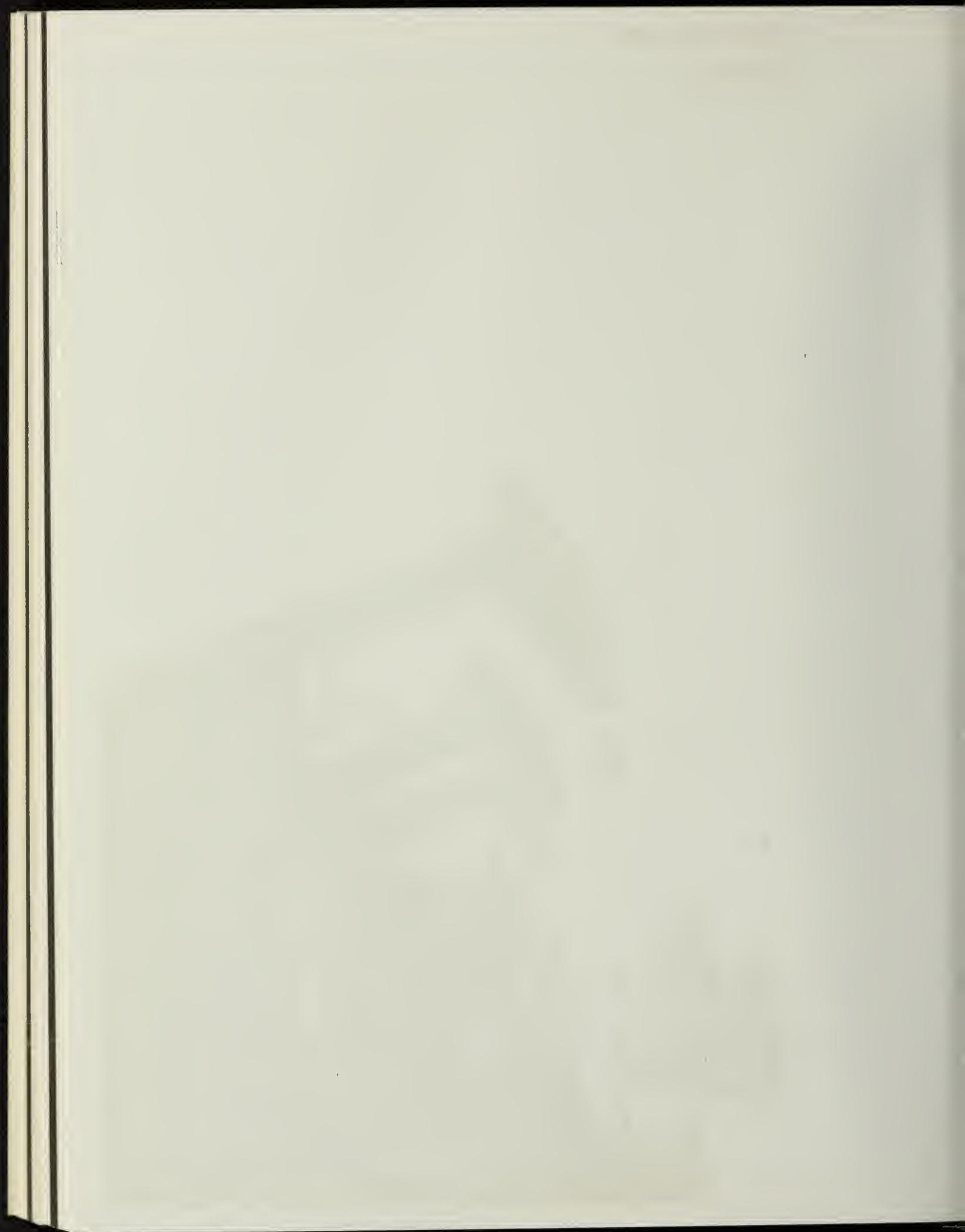
- Gasohol has been eliminated as a line item from all tables. Gasohol is now included with finished leaded or unleaded gasoline.
- The production, stock level, and movements of distillate fuel oil are no longer reported in disaggregate as Distillate, less No. 4 Fuel Oil and No. 4 Fuel Oil. They are now combined under the single category, Distillate Fuel Oil.
- Table 20 (formerly Table 24), *Stocks of Crude Oil and Petroleum Products* no longer contains refinery district breakdowns for pipelines and bulk terminals.
- Table 18, *Refinery Receipts of Crude Oil* and Table 19, *Fuels Consumed at Refineries by PAD District* have been eliminated on a monthly basis and will be published on an annual basis in the *Petroleum Supply Annual*.
- Tables 25, 26, 28 and 29 (formerly 29 through 32) reflect the elimination of No. 4 fuel oil as a separate category and the breakdown of sulfur content for residual fuel oil has been reduced from five to three categories.
- The requirement to report crude oil burned on leases and pipelines as either distillate or residual fuel oil has been eliminated. The consumption of crude oil as a fuel is now reflected in Tables 1 through 10 in "product supplied" of crude oil. This also applies to the historical section.
- Alcohol has been eliminated as a line item and is included with the product category, other hydrocarbons.
- Road oil and asphalt have been combined into a single category.
- Table 27, *Movements of Residual Fuel Oil by Tanker and Barge Between PAD Districts, by Sulfur Level*, has been added.
- Table 12, *Offshore Production of Crude Oil (Including Lease Condensate) by State* and Table 13, *Production of Lease Condensate By State*, have been eliminated. The information previously contained in Table 12 can now be found in footnote 1 of Table 11.

In addition to the changes in the tables listed above, the Explanatory Notes and Glossary have been revised to reflect the consolidated Petroleum Supply Reporting System.



Petroleum Focus





Petroleum Supply Summary

Average Volume for Period (Million Barrels Per Day)	February			Cumulative January Through February		
	1983	1982	% Change	1983	1982	% Change
Total Product Supplied	14.9	15.9	- 6.6	14.8	15.9	- 6.8
Motor Gasoline	6.1	6.1	- 0.3	6.0	6.0	0.4
Distillate Fuel Oil	2.9	3.2	- 9.9	2.8	3.3	- 14.9
Residual Fuel Oil	1.6	2.3	- 27.5	1.6	2.2	- 27.1
Crude Inputs to Refineries	10.9	11.3	- 3.4	11.0	11.5	- 4.2
Crude Oil and Natural Gas Liquids Production	10.3	10.2	1.1	10.3	10.2	1.0
Net Imports ¹	2.3	3.9	- 39.6	2.9	4.2	- 30.3
Net Crude Oil Imports ²	1.8	2.5	- 26.8	2.2	2.9	- 22.6
SPR Imports	0.2	0.2	49.1	0.2	0.2	38.2
Net Product Imports	0.3	1.2	- 76.7	0.4	1.1	- 60.3
Crude Oil Stock Withdrawal ²	- 0.29	(s)	—	- 0.32	- 0.04	—
Product Stock Withdrawal	1.20	1.27	—	1.03	1.19	—
Stocks at End of Period (Million Barrels)						
Crude Oil ²	366	371	Nm			
Motor Gasoline ³	252	262	Nm			
Distillate Fuel Oil	146	147	Nm			
Residual Fuel Oil	50	58	Nm			
Total Product	754	819	Nm			
SPR	306	241	Nm			
Total	1,427	1,431	Nm			

¹Gross imports of crude oil (including Strategic Petroleum Reserve) and petroleum products less exports of crude oil and petroleum products.

²Excluding Strategic Petroleum Reserve (SPR).

³Including blending components.

(s) Less than 5,000 barrels per day

Note: Percent changes are based on unrounded values. February 1983 data are estimates based on weekly data, except for export estimates which are January 1983 monthly values.

Source: Energy Information Administration, *Petroleum Supply Monthly*, March 1983.

Nm = Not meaningful due to new stock basis.

Petroleum Supply Reporting System Overview

January 1983 marked the implementation of recent changes in the collection, processing and availability of the Energy Information Administration's petroleum supply data. Survey forms and definitions have been made consistent; the frames for bulk terminals, petroleum product pipelines and crude oil stock holders were updated, and both monthly and weekly survey processing systems were redesigned and are being incorporated into the new Petroleum Supply Reporting System (PSRS). This article summarizes the changes that were made and describes their impact.

The Petroleum Supply Reporting System

Beginning with January reporting, all monthly and weekly data were collected on survey forms which are part of the PSRS. The integration of all survey forms into a single reporting system is intended to assure consistency among forms, definitions and data. The PSRS includes the following survey forms:

New Form Number	Name	Old Form Number
EIA-800	Weekly Refinery Report	EIA-161
EIA-801	Weekly Bulk Terminal Report	EIA-162
EIA-802	Weekly Product Pipeline Report	EIA-163
EIA-803	Weekly Crude Oil Stocks Report	EIA-164
EIA-804	Weekly Imports Report	EIA-165
EIA-805	Weekly Shipments from Puerto Rico	
EIA-810	Monthly Refinery Report	EIA-87
EIA-811	Monthly Bulk Terminal Report	EIA-88
EIA-812	Monthly Product Pipeline Report	EIA-89
EIA-813	Monthly Crude Oil Report	EIA-90
ERA-60	Monthly Imports Report	ERA-60
EIA-815	Monthly Shipments from Puerto Rico	P-133
EIA-816	Monthly Natural Gas Liquids Report	EIA-64
EIA-817	Monthly Tanker and Barge Movement Report	EIA-170
EIA-820	Annual Refinery Report	EIA-177

The information gathered by PSRS survey forms is used to determine the supply and disposition of crude oil, petroleum products and natural gas liquids. These data are published in the *Weekly Petroleum Status Report (WPSR)*, the *Petroleum Supply Monthly (PSM)*, the *Petroleum Supply Annual (PSA)*, the *Monthly Energy Review (MER)*, and the *Annual Energy Report (AER)*. Some of this information has been collected and published by the Government since 1910. The PSRS data represent the most complete, detailed collection of petroleum supply data available.

The PSRS was initiated to improve survey forms and processing consistency, to reduce respondent burden and to increase accuracy. Respondent burden was reduced by eliminating redundant and infrequently requested data elements, by consolidating reported items and by increasing use of sampling. Consistency among surveys was enhanced by preparing a single set of definitions for all petroleum supply surveys. The changes between old and new product definitions resolve differences in wording, and add references to American Society for Testing and Materials (ASTM) specifications, where appropriate. These changes removed the ambiguity concerning data reported on different surveys.

The proposed forms and definitions were circulated to reporting companies, industry associations and the public for review in early 1982, and a public hearing was held on June 10, 1982. The forms and definitions which comprise the PSRS were finalized after these meetings and approved by the Office of Management and Budget.

Description of Reporting Changes

Changes in reporting can be grouped into five categories. Some were made to improve consistency, others to classify activity more precisely, and others to combine or eliminate information elements or to reduce the frequency of reporting in recognition of the trade-off between data value and reporting burden. The changes are itemized below.

Changes to Improve Consistency

- Motor gasoline was divided into three standard categories (Finished Leaded Motor Gasoline, Finished Unleaded Motor Gasoline and Motor Gasoline Blending Components) in the weekly, monthly and annual PSRS forms.
- Aviation Gasoline Blending Components were added to Form EIA-817.
- Refinery Crude Oil Stocks were added to Form EIA-800 to be consistent with data on Form EIA-810.

Changes in Classification

- Crude oil burned as fuel on leases and by pipelines is reported as a single item on Form EIA-813. Previously it was reported as distillate or residual fuel oil consumption.
- Number 4 Fuel Oil is now included with Distillate Fuel Oil on all weekly, monthly and annual PSRS forms.

- Gasohol was eliminated as a separate category on monthly forms and is now reported as either "Finished Leaded Motor Gasoline" or "Finished Unleaded Motor Gasoline" on all weekly and monthly PSRS forms.
- Waterborne movements of petrochemical feedstocks are now divided into Naphtha-less than 400 degrees end-point and Other Oils—over 400 degrees end-point on Form EIA-817.

Reduction in Reporting Categories

- The distinction between domestic and foreign crude oil (including lease condensate) inputs to refineries and stocks was eliminated on Forms EIA-800 and EIA-803.
- Refinery district levels of data aggregations were consolidated into Petroleum Administration for Defense Districts (PADD) except that PADD 1 was divided into three subdistricts on Forms EIA-801, 802, 804, 805, 812 and 817.
- Detailed categories of Gross Input to Crude Oil Distillation Units were eliminated, and only Total Gross Inputs to Crude Oil Distillation Units is collected on Form EIA-810.
- The distinction between "light" and "heavy" crude oil input to refineries was eliminated on Form EIA-820.
- Waterborne movements of crude oil and petroleum products between PADDs, on Form EIA-817, no longer reflect shipping and receiving States.
- Reportings of production and stocks of Number 4 Fuel Oil by sulfur levels were eliminated from Forms EIA-810, 811, 812 and 817.
- Crude oil stocks are collected at PADD levels rather than State levels on Form EIA-813.
- Second year projections of refinery operable capacity, inputs and outputs were eliminated from Form EIA-820.
- Shipments from natural gas processing plants no longer reflect destination by facility type on Form EIA-816.
- The four categories for Unfinished Oils were reduced to two on Form EIA-810.
- The five categories for sulfur content of Residual Fuel Oil were reduced to three on Forms EIA-810, 811 and 817.

Combination of Items Previously Reported Separately

- Normal Butane and Other Butanes were combined into a single category, "Butane" on Forms EIA-810, 811 and 816.

- Three subcategories of lubricating oils (Bright Stock, Neutral and Other) were combined into a single category, "Lubricating Oils" on Form EIA-810.
- Three subcategories of waxes (Microcrystalline, Crystalline-Fully Refined and Crystalline-Other) were combined into a single category, "Petroleum Waxes" on Form EIA-810.
- Asphalt and Road Oil were combined into a single category, "Asphalt and Road Oil" on Forms EIA-810 and 811.
- Lease Condensate was combined with Crude Oil on Form EIA-820.
- Catalytic Hydrorefining was combined into "Catalytic Hydrotreating" on Form EIA-820.
- Plant fuel use and Losses were combined on Form EIA-816.
- Natural gasoline and isopentane were combined on Form EIA-816.

Elimination of Items from Reports

- The reporting of crude oil imports by source by PADD was eliminated on Form EIA-804.
- Kerosene was eliminated as an individual item on Forms EIA-800, 801, 802 and 804.

Changes in Reporting Frequency

- Refinery receipts of crude oil by method of transportation, formerly reported monthly, is now reported annually on Form EIA-820.
- Fuel, electric energy and steam consumed for all purposes at refineries, formerly reported monthly, is now reported annually on Form EIA-820.

Changes were made to the weekly surveys to make them consistent with the monthly surveys. For example, in the revised system, stocks of crude oil at refineries are now reported on the *Weekly Refinery Report* form, rather than on the *Weekly Crude Oil Stocks Report* form. This parallels the reporting of crude oil stocks on the monthly forms. Another change to the weekly surveys was the division of motor gasoline into three categories: finished leaded, finished unleaded and blending components, the same as in the monthly surveys. One difference still remaining between monthly and weekly surveys involves the derivation of net production (gross production minus inputs) of petroleum products. In weekly surveys, respondents report net production directly. In monthly surveys, respondents report inputs and production of petroleum products, and net production is calculated by the Energy Information Administration. This difference remains because the reporting of inputs on the weekly form would cause

a substantial increase in respondent burden without any significant increase in the accuracy of reported data.

Augmentation of Frames

For each monthly survey, a listing (a frame) of operators of all facilities required to complete the survey is maintained. All frames are updated continuously as new facilities are identified. In addition, investigations of the adequacy of the frames are periodically initiated. A major update to the frames was started in 1981. This evaluation established that the refinery frame was complete and accurate. However, frames for bulk terminals, pipelines, and crude oil stocks facilities were found to be outdated. For each type of facility, several sources, such as industry trade association directories, listings of operators published by Federal and State agencies, U.S. Army Corps of Engineers and Coast Guard reports, and the Dun and Bradstreet file of business establishments, were consulted, and a list of possible new respondents to each survey was compiled.

During the fall of 1981, three exploratory surveys were conducted of potential new respondents to bulk terminal, pipeline and crude oil stocks facility surveys using the new lists. Each possible new frame member was asked if that firm or any subsidiary stored crude oil or petroleum products in significant quantities. As a result of the three exploratory surveys, operators of 285 bulk terminals, 23 pipelines and 96 crude oil stocks facilities were identified as prospective survey respondents.

Forms were mailed to the firms and data collection began during the summer of 1982. Each of the identified operators was required to report its stocks on a monthly basis. In a number of cases, examination of the reported data revealed that continued participation was not required because: 1) storage volume was below the volumetric cutoff; 2) the facility did not store petroleum products; or, 3) stocks were being held for consumption and not for sale.

As a result of this exploratory survey, operators of 160 bulk terminals, 15 pipelines and 30 crude oil stocks

Table 1. Changes in stocks of crude oil and Petroleum Products of December 31, 1982 (New Basis minus Old Basis) (Thousand Barrels)

Commodity	PAD District					U.S. Total
	I	II	III	IV	V	
Crude Oil	38	87	2,105	55	23	2,308
Petroleum Products	10,191	7,113	6,833	77	6,568	30,782
Natural Gasoline & Isopentane	1	- 4	- 8	- 4	- 4	- 20
Unfractionated Stream	0	- 4	474	- 4	0	466
Plant Condensate	0	0	- 2	- 2	0	- 4
Ethane	0	0	759	0	0	759
Propane for Other Uses	908	1,421	954	- 1	442	3,725
Butane for Other Uses	56	429	276	- 1	498	1,257
Butane-Propane Mix for Other Uses	0	161	71	0	0	232
Ethane-Propane Mixtures	0	403	1,105	0	0	1,508
Isobutane	1	120	4	0	- 1	124
Motor Gasoline Blending						
Components	0	152	392	0	263	807
Total Finished Motor Gasoline	1,910	1,736	1,417	0	3,038	8,101
Finished Leaded ¹	926	997	548	0	1,523	3,994
Finished Unleaded ¹	995	791	869	1	1,522	4,178
Finished Aviation Gasoline	0	0	8	0	0	8
Naphtha-Type Jet Fuel	870	6	73	0	567	1,516
Kerosene-Type Jet Fuel	569	46	43	0	167	825
Kerosene	219	143	1	0	1	364
Total Distillate Fuel Oil	4,093	1,210	678	27	976	6,984
Residual Fuel Oil	952	161	424	0	517	2,054
Lubricants	231	389	17	0	13	650
Asphalt	327	745	113	62	91	1,338
Misc. Products	56	- 1	32	0	0	87
Total Oils	10,229	7,200	8,938	132	6,591	33,090

¹Includes increases due to elimination of gasohol as a separate category.

Totals may not equal sum of components due to independent rounding.

Note: Product categories that had no change in stock level are not shown.

holders were added to the respective frames. In addition, 50 facilities for which stocks only were reported on the Form EIA-64, *Natural Gas Liquids Operations Report*, were transferred to the frame for the Form EIA-811, *Monthly Bulk Terminal Report*. Due to these changes, the total stocks of petroleum products, as listed in Table 20 of the detailed statistics section of this publication, increased approximately 4 percent, and the distribution of stocks between the types of reporters shifted.

Table 30 of the detailed statistics section shows the December 1982 stocks of crude oil and petroleum products for both old and new facilities (new basis). This can be compared to Table 24 data in the February 1982 *PSM*, which shows December stocks for the old facili-

ties only (old basis). Table 1 in this article shows the volumetric changes in stocks caused by the addition of new units to the frame and changes in the reporting requirements. The largest increases at the U.S. level were for distillate fuel oil, finished leaded and finished unleaded motor gasoline and propane.

A new sample, selected using the updated frames, has begun responding to the weekly reporting system. Their data will be included in the *Weekly Petroleum Status Report* in early April. Data for the month of January 1983, and for the weeks in February and March 1983, will be adjusted to reflect the contribution of the new frame members, and to make weekly estimates for 1983 stocks consistent with those now being reported in the *Petroleum Supply Monthly*.



Summary Statistics



Crude Oil¹ and Petroleum Products Overview

		Field Production			Stock Withdrawal ²			Ending Stocks ³
		Total Domestic ⁴	Crude Oil	Natural Gas Plant Production	Crude Oil ⁵	Petroleum Products	Petroleum Products Supplied	Crude Oil ⁵ and Petroleum Products
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	10,975	9,208	1,738	11	-146	17,308	1,008
1974	AVERAGE	10,498	8,774	1,688	-62	-117	16,653	1,074
1975	AVERAGE	10,045	8,375	1,633	-17	-145	16,322	1,133
1976	AVERAGE	9,774	8,132	1,603	-39	96	17,461	1,112
1977	AVERAGE	9,913	8,245	1,618	-170	-378	18,431	1,312
1978	AVERAGE	10,328	8,707	1,567	-78	172	18,847	1,278
1979	AVERAGE	10,179	8,552	1,584	-148	-25	18,513	1,341
1980	AVERAGE	10,214	8,597	1,573	-98	-42	17,056	1,392
1981	January	10,231	8,540	1,652	50	1,159	18,430	1,388
	February	10,294	8,604	1,653	-278	250	16,989	1,389
	March	10,272	8,613	1,624	-632	224	15,907	1,401
	April	10,195	8,557	1,599	-595	148	15,350	1,415
	May	10,160	8,501	1,593	-391	-374	15,353	1,438
	June	10,287	8,629	1,594	-135	406	16,095	1,430
	July	10,098	8,500	1,548	-360	91	15,682	1,439
	August	10,243	8,583	1,614	397	-999	15,263	1,457
	September	10,281	8,604	1,612	-285	-341	15,655	1,476
	October	10,225	8,563	1,598	-760	477	15,822	1,485
	November	10,269	8,586	1,630	-325	-233	15,593	1,501
	December	10,220	8,585	1,590	-170	745	16,596	1,484
	AVERAGE	10,230	8,572	1,609	-290	130	16,058	
1982	January	10,257	8,669	1,548	-236	1,129	15,890	1,461
	February	10,261	8,690	1,524	-216	1,268	15,941	1,431
	March	10,212	8,597	1,570	-65	1,049	15,560	1,401
	April	10,296	8,652	1,588	107	1,594	16,048	1,350
	May	10,223	8,660	1,520	49	-34	14,845	1,349
	June	10,242	8,681	1,505	86	-515	14,931	1,362
	July	10,228	8,649	1,521	-155	-865	14,771	1,394
	August	10,301	8,701	1,543	-440	4	14,838	1,407
	September	10,306	8,733	1,513	252	-489	14,921	1,415
	October	10,283	8,676	1,540	-564	-55	14,820	1,434
	November	10,377	8,690	1,634	-357	-357	15,031	1,455
	December	10,348	8,660	1,638	143	703	15,508	⁶ 1,429
	AVERAGE	10,278	8,671	1,554	-117	280	15,253	
1983	January*	10,356	8,634	1,668	R-567	R 865	R14,765	R1,453
	February**	NA	8,659	NA	-514	1,204	14,892	1,427
	AVERAGE	NA	8,646	NA	-542	1,026	14,825	

1 Includes lease condensate.

2 A negative number indicates an increase in stocks and a positive number indicates a decrease.

3 Ending stocks for 1973-1980 are totals as of December 31.

4 Includes crude oil, natural gas plant production, other hydrocarbons and alcohol.

5 Includes stocks located in the Strategic Petroleum Reserve.

6 New basis stocks for December 31, 1982 = 1,462.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.1.

** Italics denote preliminary data. See Explanatory Note 8.

Note: Annual stock changes for 1975, 1981, and 1983 were calculated using expanded survey coverage.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil¹ and Petroleum Products Overview (continued)

		Imports			Exports				
		Total	Crude Oil ²	Petroleum Products	Total	Crude Oil	Petroleum Products		Net ³ Imports
Thousand Barrels per Day									
1973	AVERAGE	6,256	3,244	3,012	231	2	229	6,025	
1974	AVERAGE	6,112	3,477	2,635	221	3	218	5,892	
1975	AVERAGE	6,056	4,105	1,951	209	6	204	5,846	
1976	AVERAGE	7,313	5,287	2,026	223	8	215	7,090	
1977	AVERAGE	8,807	6,615	2,193	243	50	193	8,565	
1978	AVERAGE	8,363	6,356	2,008	362	158	204	8,002	
1979	AVERAGE	8,456	6,519	1,937	472	235	237	7,984	
1980	AVERAGE	6,909	5,263	1,646	544	287	258	6,365	
1981	January	6,827	4,932	1,895	558	339	219	6,270	
	February	6,772	4,873	1,899	569	198	371	6,203	
	March	6,028	4,521	1,507	586	210	376	5,442	
	April	5,668	4,338	1,330	570	198	372	5,098	
	May	5,775	4,287	1,489	595	312	283	5,180	
	June	5,435	4,061	1,375	420	123	297	5,015	
	July	5,816	4,296	1,521	571	257	314	5,245	
	August	5,767	4,179	1,588	644	204	440	5,123	
	September	6,365	4,740	1,624	519	194	325	5,845	
	October	5,959	4,380	1,579	738	226	512	5,221	
	November	5,741	4,046	1,695	701	278	423	5,041	
	December	5,843	4,137	1,706	656	189	467	5,187	
	AVERAGE	5,996	4,396	1,599	595	228	367	5,401	
1982	January	5,232	3,648	1,585	829	238	591	4,404	
	February	4,691	2,949	1,742	804	304	499	3,887	
	March	4,461	2,856	1,606	882	321	561	3,579	
	April	4,286	2,813	1,474	786	174	611	3,501	
	May	4,784	3,314	1,471	803	262	542	3,981	
	June	5,227	3,782	1,445	703	94	609	4,524	
	July	5,763	4,245	1,518	741	229	512	5,022	
	August	5,156	3,820	1,336	858	304	554	4,298	
	September	5,359	3,603	1,757	791	184	606	4,569	
	October	5,230	3,636	1,594	932	270	662	4,298	
	November	5,726	3,863	1,864	786	262	524	4,940	
	December	4,562	2,956	1,606	860	193	667	3,702	
	AVERAGE	5,041	3,461	1,581	815	222	579	4,226	
1983	January*	R 4,372	R 2,938	R 1,434	973	117	856	3,399	
	February**	3,319	2,173	1,146	NA	NA	NA	NA	
	AVERAGE	3,872	2,575	1,297	NA	NA	NA	NA	

¹ Includes lease condensate.

² Includes crude oil for storage in the Strategic Petroleum Reserve.

³ Net Imports = Imports minus Exports.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.1.

** Italics denote preliminary data. See Explanatory Note 8.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil¹ Supply and Disposition

		Supply						
		Field Production		Imports			Stock Withdrawal ²	
		Total Domestic	Alaskan	Total	SPR ³	Other	SPR ³	Other
		Thousand Barrels per Day						
								Unac- accounted for Crude Oil
1973	AVERAGE	9,208	198	3,244		3,244	11	3
1974	AVERAGE	8,774	193	3,477		3,477	-62	-25
1975	AVERAGE	8,375	191	4,105		4,105	-17	17
1976	AVERAGE	8,132	173	5,287		5,287	-39	77
1977	AVERAGE	8,245	464	6,615	21	6,594	-20	-6
1978	AVERAGE	8,707	1,229	6,356	162	6,195	-163	-57
1979	AVERAGE	8,552	1,401	6,519	67	6,452	-67	-11
1980	AVERAGE	8,597	1,617	5,263	44	5,219	-45	34
1981	January	8,540	1,606	4,932	106	4,826	-151	113
	February	8,604	1,619	4,873	80	4,793	-127	-41
	March	8,613	1,618	4,521	140	4,382	-155	154
	April	8,557	1,608	4,338	272	4,066	-444	51
	May	8,501	1,580	4,287	386	3,901	-513	286
	June	8,629	1,632	4,061	318	3,743	-434	49
	July	8,500	1,605	4,296	175	4,121	-324	147
	August	8,583	1,602	4,179	257	3,922	-372	16
	September	8,604	1,607	4,740	435	4,305	-486	-295
	October	8,563	1,596	4,380	453	3,927	-501	166
	November	8,586	1,614	4,046	271	3,774	-259	279
	December	8,585	1,623	4,137	165	3,971	-252	52
	AVERAGE	8,572	1,609	4,396	256	4,141	-336	83
1982	January	8,669	1,712	3,648	170	3,478	-159	-138
	February	8,690	1,715	2,949	159	2,790	-213	199
	March	8,597	1,702	2,856	185	2,671	-235	278
	April	8,652	1,687	2,813	190	2,623	-233	56
	May	8,660	1,725	3,314	204	3,110	-176	105
	June	8,681	1,675	3,782	105	3,678	-105	110
	July	8,649	1,715	4,245	97	4,147	-97	1
	August	8,701	1,699	3,820	208	3,611	-208	140
	September	8,733	1,707	3,603	139	3,463	-143	-218
	October	8,676	1,677	3,636	216	3,420	-216	324
	November	8,690	1,667	3,863	180	3,683	-179	-141
	December	8,660	1,663	2,956	124	2,832	-125	2
	AVERAGE	8,671	1,695	3,461	165	3,296	-174	60
1983	January*	8,634	1,698	R 2,938	R 219	R 2,720	R -219	R -348
	February**	8,659	1,725	2,173	237	1,936	-230	-285
	AVERAGE	8,646	1,711	2,575	228	2,348	-224	-318

¹ Includes lease condensate.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Strategic Petroleum Reserve.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.2.

** Italics denote preliminary data. See Explanatory Note 8.

Note: Annual stock changes for 1975, 1981, and 1983 were calculated using expanded survey coverage.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil¹ Supply and Disposition (continued)

		Supply	Disposition				Ending Stocks ²		
		Crude Used Directly ³	Crude Losses	Refinery Inputs	Exports	Product Supplied ³	Total Crude Oil	SPR ⁴	Other Primary
		Thousand Barrels per Day					Millions of Barrels		
1973	AVERAGE	-19	13	12,431	2	NA	242		242
1974	AVERAGE	-15	13	12,133	3	NA	265		265
1975	AVERAGE	-17	13	12,442	6	NA	271		271
1976	AVERAGE	-18	15	13,416	8	NA	285		285
1977	AVERAGE	-14	16	14,602	50	NA	348	7	340
1978	AVERAGE	-14	16	14,739	158	NA	376	67	309
1979	AVERAGE	-13	16	14,648	235	NA	430	91	339
1980	AVERAGE	-13	15	13,481	287	NA	466	108	358
1981	January	-43	6	13,247	339	NA	486	112	374
	February	-55	3	12,902	198	NA	494	116	378
	March	-57	6	12,383	210	NA	514	121	393
	April	-59	3	12,091	198	NA	532	134	397
	May	-59	3	12,309	312	NA	544	150	394
	June	-58	7	12,415	123	NA	548	163	385
	July	-58	7	12,261	257	NA	559	173	386
	August	-58	5	12,908	204	NA	547	185	362
	September	-61	4	12,505	194	NA	555	199	356
	October	-63	3	12,057	226	NA	579	215	364
	November	-64	4	12,240	278	NA	589	223	366
	December	-63	4	12,349	189	NA	594	230	363
	AVERAGE	-58	5	12,470	228	NA			
1982	January	-63	3	11,638	238	NA	606	235	371
	February	-64	2	11,252	304	NA	612	241	371
	March	-63	5	11,277	321	NA	614	249	366
	April	-65	3	11,386	174	NA	611	256	355
	May	-62	3	11,801	262	NA	609	261	348
	June	-60	7	12,498	94	NA	607	264	343
	July	-60	3	12,447	229	NA	612	267	345
	August	-57	2	11,858	304	NA	625	274	352
	September	-56	3	12,126	184	NA	618	278	340
	October	-51	2	11,750	270	NA	635	285	351
	November	-51	1	11,741	262	NA	646	290	356
	December	-53	1	11,514	193	NA	⁵ 642	294	⁵ 348
	AVERAGE	-58	4	11,776	236	NA			
1983	January*	NA	2	R11,070	117	54	R 661	R 301	R 361
	February**	NA	NA	10,868	NA	NA	672	306	366
	AVERAGE	NA	NA	10,974	NA	NA			

¹ Includes lease condensate.

² Ending stocks for 1973-1980 are totals as of December 31.

³ Beginning in January 1983, crude oil used directly as fuel is presented as product supplied for crude oil. Prior to January 1983 crude oil used directly was included with crude oil losses in this table and with product supplied for distillate and residual fuel oils.

⁴ Strategic Petroleum Reserve.

⁵ New basis stocks for December 31, 1982 = 644 (Total) and 350 (Other Primary).

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.2.

** Italics denote preliminary data. See Explanatory Note 8.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Finished Motor Gasoline Supply and Disposition

		Supply			Disposition				Ending Stocks ¹	
		Total Production	Imports ²	Stock With-drawal ^{2 3}	Exports	Product Supplied			Total Motor Gasoline ⁴	Finished Motor Gasoline
						Total	Unleaded ⁵	Unleaded		
Thousand Barrels per Day								Percent of Total	Millions of Barrels	
1973	AVERAGE	6,535	134	9	4	6,674	NA	NA	209	
1974	AVERAGE	6,360	204	-24	2	6,537	NA	NA	218	
1975	AVERAGE	6,520	184	-28	2	6,675	NA	NA	235	
1976	AVERAGE	6,841	131	10	3	6,978	NA	NA	231	
1977	AVERAGE	7,033	217	-72	2	7,177	1,976	27.5	258	
1978	AVERAGE	7,169	190	54	1	7,412	2,521	34.0	238	
1979	AVERAGE	6,852	181	2	(^s)	7,034	2,798	39.8	237	
1980	AVERAGE	6,506	140	-66	1	6,579	3,067	46.6	261	
1981	January	6,715	138	-421	(^s)	6,431	3,141	48.8	276	227
	February	6,308	111	-118	1	6,301	3,095	49.1	284	230
	March	6,213	171	-81	(^s)	6,303	3,097	49.1	285	232
	April	6,114	186	303	(^s)	6,602	3,284	49.7	272	223
	May	6,122	150	344	1	6,615	3,115	47.1	259	213
	June	6,220	186	622	1	7,028	3,419	48.6	242	194
	July	6,405	151	268	(^s)	6,823	3,424	50.2	228	186
	August	6,611	124	-95	3	6,637	3,344	50.4	233	189
	September	6,564	169	-70	2	6,662	3,338	50.1	237	191
	October	6,426	147	7	3	6,578	3,257	49.5	236	190
	November	6,564	148	-338	1	6,373	3,198	50.2	248	201
	December	6,586	197	-91	11	6,681	3,444	51.5	253	203
	AVERAGE		6,405	157	28	2	6,588	3,264	49.5	
1982	January	6,181	114	-358	18	5,920	3,033	51.2	262	214
	February	5,917	133	28	8	6,070	3,145	51.8	262	213
	March	6,004	183	469	44	6,612	3,396	51.4	248	199
	April	6,104	177	641	33	6,890	3,494	50.7	223	180
	May	6,322	163	188	23	6,650	3,415	51.3	215	174
	June	6,767	195	-136	14	6,812	3,561	52.3	220	178
	July	6,788	200	-165	24	6,799	3,574	52.6	226	183
	August	6,447	284	-60	16	6,655	3,520	52.9	226	185
	September	6,530	215	-217	22	6,507	3,385	52.0	234	191
	October	6,253	177	-25	15	6,391	3,360	52.6	234	192
	November	6,273	206	91	11	6,559	3,448	52.6	230	189
	December	6,540	178	-164	7	6,548	3,486	53.2	*235	*194
	AVERAGE		6,347	186	24	20	6,537	3,403	52.1	
1983	January*	R 6,020	R148	R-186	(^s)	R 5,981	3,352	56.0	R 251	R208
	February**	5,873	131	56	NA	6,050	NA	NA	252	209
	AVERAGE	5,950	140	-71	NA	6,014	NA	NA		

¹ Ending stocks for 1973-1980 are totals as of December 31.

² Beginning in 1981, excludes blending components.

³ A negative number indicates an increase in stocks and a positive number indicates a decrease.

⁴ Includes motor gasoline blending components.

⁵ Includes gasohol.

⁶ New basis stocks for December 31, 1982 = 244 (Total) and 203 (Finished)

Totals may not equal sum of components due to independent rounding.

(s) = Less than 500 barrels per day. NA = Not available. R = Revised data.

* See Explanatory Note 9.3.

** Italics denote preliminary data. See Explanatory Note 8.

Note: Beginning in January 1981, survey forms were modified.

Note: Annual stock changes for 1975, 1981, and 1983 were calculated using expanded survey coverage.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Distillate Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Crude Used Directly ³	Exports	Product Supplied ³	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	2,822	392	-115	2	9	3,092	196
1974	AVERAGE	2,669	289	-9	2	2	2,948	200
1975	AVERAGE	2,654	155	40	2	1	2,851	209
1976	AVERAGE	2,924	146	62	1	1	3,133	186
1977	AVERAGE	3,278	250	-176	1	1	3,352	250
1978	AVERAGE	3,167	173	93	1	3	3,432	216
1979	AVERAGE	3,153	193	-34	1	3	3,311	229
1980	AVERAGE	2,662	142	64	1	3	2,866	205
1981	January	2,989	273	836	11	(s)	4,109	179
	February	2,809	325	246	11	17	3,373	173
	March	2,484	147	264	9	(s)	2,904	164
	April	2,418	116	-9	10	3	2,532	165
	May	2,454	179	-232	10	(s)	2,411	172
	June	2,501	225	-270	9	(s)	2,464	180
	July	2,395	179	-204	10	2	2,378	186
	August	2,656	174	-450	8	(s)	2,388	200
	September	2,610	129	-235	10	1	2,513	207
	October	2,485	119	197	9	5	2,803	201
	November	2,716	124	36	11	6	2,880	200
	December	2,856	95	277	11	26	3,212	192
	AVERAGE	2,613	173	38	10	5	2,829	
1982	January	2,615	96	780	10	90	3,410	166
	February	2,447	130	689	11	90	3,187	147
	March	2,294	48	612	10	84	2,881	128
	April	2,357	59	631	13	64	2,996	109
	May	2,618	74	-184	10	75	2,444	114
	June	2,731	100	-335	10	55	2,450	125
	July	2,734	124	-761	11	24	2,084	148
	August	2,526	79	-346	10	40	2,228	159
	September	2,658	59	-77	12	139	2,514	161
	October	2,837	97	-290	8	66	2,586	170
	November	2,863	141	-514	8	24	2,475	186
	December	2,655	109	226	10	143	2,856	179
	AVERAGE	2,612	93	32	10	74	2,672	
1983	January*	R 2,314	R 58	R 561	NA	173	R 2,760	R 168
	February**	2,158	40	744	NA	NA	2,872	146
	AVERAGE	2,240	49	648	NA	NA	2,813	

¹ Ending stocks for 1973 - 1980 are totals as of December 31.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Beginning in January 1983, product supplied for distillate fuel oil does not include crude oil used directly. See Explanatory Note 4.

⁴ New basis stocks for December 31, 1982 = 186.

Totals may not equal sum of components due to independent rounding.

(s) = Less than 500 barrels per day. NA = Not available. R = Revised data.

* See Explanatory Note 9.4.

** Italics denote preliminary data. See Explanatory Note 8.

Note: Beginning in January 1981, survey forms were modified.

Note: Annual stock changes for 1975, 1981, and 1983 were calculated using expanded survey coverage.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Residual Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Crude Used Directly ³	Exports	Product Supplied ³	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	971	1,853	5	17	23	2,822	53
1974	AVERAGE	1,070	1,587	-17	13	14	2,639	60
1975	AVERAGE	1,235	1,223	2	15	15	2,462	74
1976	AVERAGE	1,377	1,413	5	17	12	2,801	72
1977	AVERAGE	1,754	1,359	-48	13	6	3,071	90
1978	AVERAGE	1,667	1,355	-1	13	13	3,023	90
1979	AVERAGE	1,687	1,151	-15	12	9	2,826	96
1980	AVERAGE	1,580	939	10	12	33	2,508	92
1981	January	1,612	1,015	302	32	65	2,896	82
	February	1,565	954	150	44	125	2,588	78
	March	1,424	699	100	48	145	2,126	75
	April	1,320	584	66	49	151	1,868	73
	May	1,223	741	-170	49	25	1,817	78
	June	1,232	540	291	49	76	2,037	69
	July	1,174	830	2	48	82	1,971	69
	August	1,231	819	-179	50	69	1,852	75
	September	1,292	841	-176	51	126	1,882	80
	October	1,238	786	8	54	202	1,884	80
	November	1,227	880	-49	53	203	1,909	81
	December	1,329	916	110	52	157	2,250	78
	AVERAGE	1,321	800	37	48	118	2,088	
1982	January	1,183	821	328	53	235	2,150	68
	February	1,136	928	358	53	213	2,261	58
	March	1,121	910	26	53	197	1,912	57
	April	1,162	762	124	52	234	1,867	54
	May	1,127	738	-175	52	191	1,551	59
	June	1,077	643	-49	50	217	1,504	61
	July	1,029	576	51	49	239	1,466	59
	August	1,007	519	200	47	235	1,538	53
	September	1,007	871	-302	44	148	1,472	62
	October	954	758	-56	43	234	1,466	64
	November	989	843	-95	43	182	1,597	66
	December	990	747	8	43	186	1,602	66
	AVERAGE	1,065	758	33	48	209	1,695	
1983	January*	R 935	R 691	R 243	NA	294	R 1,574	R 61
	February**	896	632	297	NA	NA	1,640	50
	AVERAGE	916	663	269	NA	NA	1,605	

¹ Ending Stocks for 1973-1980 are totals as of December 31.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Beginning in January 1983, product supplied for residual fuel oil does not include crude oil used directly. See Explanatory Note 4.

⁴ New basis stocks for December 31, 1982 = 68.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.4.

** Italics denote preliminary data. See Explanatory Note 8.

Note: Beginning in January 1981, survey forms were modified.

Note: Annual stock changes for 1975, 1981, and 1983 were calculated using expanded survey coverage.

Geographic Coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Liquefied Petroleum Gases Supply and Disposition

		Supply			Disposition			Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Refinery Inputs	Exports	Product Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	1,600	132	-35	220	27	1,449	99
1974	AVERAGE	1,565	123	-38	220	25	1,406	113
1975	AVERAGE	1,527	112	-35	246	26	1,333	125
1976	AVERAGE	1,535	130	24	260	25	1,404	116
1977	AVERAGE	1,566	161	-55	233	18	1,422	136
1978	AVERAGE	1,537	123	12	239	20	1,413	132
1979	AVERAGE	1,556	217	70	236	15	1,592	111
1980	AVERAGE	1,535	216	-27	233	21	1,469	120
1981	January	1,617	306	363	352	21	1,913	117
	February	1,593	327	173	303	21	1,769	112
	March	1,551	260	-4	257	20	1,530	112
	April	1,586	214	-236	231	26	1,308	119
	May	1,587	189	-258	220	19	1,279	127
	June	1,567	206	-208	237	24	1,304	133
	July	1,507	213	-258	215	17	1,229	141
	August	1,592	195	-242	235	149	1,160	149
	September	1,622	199	-75	287	21	1,438	151
	October	1,593	287	72	320	76	1,556	149
	November	1,571	280	86	383	58	1,495	146
	December	1,468	255	379	428	50	1,624	135
	AVERAGE	1,571	244	-18	289	42	1,466	
1982	January	1,546	314	480	398	67	1,873	122
	February	1,476	291	310	327	51	1,699	114
	March	1,523	223	145	289	74	1,528	109
	April	1,566	188	107	257	77	1,527	106
	May	1,583	186	-61	235	43	1,431	108
	June	1,571	192	-109	262	106	1,286	111
	July	1,556	227	-5	253	37	1,487	111
	August	1,591	125	-44	254	61	1,357	112
	September	1,606	247	33	273	85	1,528	111
	October	1,582	194	92	306	81	1,481	109
	November	1,603	267	172	370	37	1,634	103
	December	1,626	258	270	395	56	1,702	95
	AVERAGE	1,570	225	115	301	65	1,544	
1983	January*	1,662	240	618	313	118	2,088	84

¹ Ending stocks for 1973 - 1980 are totals as of December 31.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ New basis stocks for December 31, 1982 = 103.

Totals may not equal sum of components due to independent rounding.

* See Explanatory Note 9.5.

Note: Annual stock changes for 1975, 1981, and 1983 were calculated using expanded survey coverage.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Other Petroleum Products¹ Supply and Disposition

		Supply			Disposition			Ending Stocks ²
		Total Production	Imports	Stock Withdrawal ³	Refinery Inputs	Exports	Products Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	3,693	502	-9	750	166	3,270	208
1974	AVERAGE	3,558	432	-28	665	174	3,123	218
1975	AVERAGE	3,424	277	-2	537	160	3,002	219
1976	AVERAGE	3,643	206	-5	524	175	3,145	220
1977	AVERAGE	3,912	205	-27	514	165	3,410	230
1978	AVERAGE	4,046	166	14	492	167	3,568	225
1979	AVERAGE	4,153	195	-37	352	209	3,749	238
1980	AVERAGE	3,956	210	-23	311	198	3,634	247
1981	January	3,821	162	80	851	132	3,081	296
	February	3,723	182	-200	538	208	2,958	302
	March	3,722	230	-55	642	210	3,043	304
	April	3,711	230	24	733	192	3,040	303
	May	3,892	229	-58	594	238	3,231	305
	June	3,925	218	-29	656	197	3,261	306
	July	3,852	149	284	791	212	3,282	297
	August	3,876	276	-33	676	219	3,225	298
	September	3,718	285	215	883	176	3,159	291
	October	3,503	241	193	710	227	3,000	285
	November	3,579	262	33	784	154	2,935	284
	December	3,543	243	71	805	223	2,829	282
	AVERAGE	3,739	226	46	723	199	3,088	
1982	January	3,181	240	-102	602	180	2,536	284
	February	3,364	260	-116	646	138	2,724	287
	March	3,485	241	-204	734	161	2,627	294
	April	3,394	287	91	801	204	2,767	291
	May	3,296	309	198	823	210	2,769	285
	June	3,481	315	115	815	216	2,879	281
	July	3,578	391	15	862	187	2,935	281
	August	3,519	329	256	841	202	3,060	273
	September	3,442	365	74	767	213	2,901	271
	October	3,472	367	223	901	266	2,896	264
	November	3,464	406	-12	824	269	2,766	264
	December	3,285	314	363	886	275	2,801	253
	AVERAGE	3,413	319	77	793	211	2,805	
1983	January*	3,222	297	-371	570	271	2,307	271

¹ Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, and residual fuel oil.

² Ending Stocks for 1973-1980 are totals as of December 31.

³ A negative number indicates an increase in stocks and a positive number indicates a decrease.

⁴ New basis stocks for December 31, 1982 = 259.

Totals may not equal sum of components due to independent rounding.

* See Explanatory Note 9.6.

Note: Annual stock changes for 1975, 1981, and 1983 were calculated using expanded survey coverage.

Geographic Coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil and Petroleum Product Imports from OPEC Sources¹

	Algeria	Libya	Saudi Arabia	United Arab Emirates	Indonesia	Iran	Nigeria	Venezuela	Other OPEC ²	Total OPEC	Total Arab OPEC ³
	Thousand Barrels per Day										
1973											
AVERAGE	136	164	486	71	213	223	459	1,135	106	2,993	915
1974											
AVERAGE	190	4	461	74	300	469	713	979	88	3,280	752
1975											
AVERAGE	282	232	715	117	390	280	762	702	122	3,601	1,383
1976											
AVERAGE	432	453	1,230	254	539	298	1,025	700	134	5,066	2,424
1977											
AVERAGE	559	723	1,380	335	541	535	1,143	690	287	6,193	3,185
1978											
AVERAGE	649	654	1,144	385	573	555	919	645	226	5,751	2,963
1979											
AVERAGE	636	658	1,356	281	420	304	1,080	690	212	5,637	3,056
1980											
AVERAGE	488	554	1,261	172	348	9	857	481	130	4,300	2,551
1981											
January	341	500	1,284	93	424	0	908	549	27	4,127	2,219
February	381	468	1,122	93	406	0	866	463	92	3,891	2,064
March	352	485	1,027	47	328	0	771	360	54	3,425	1,912
April	263	485	1,034	68	307	0	812	237	39	3,245	1,867
May	393	443	933	17	297	0	664	331	124	3,203	1,796
June	356	380	865	60	367	0	528	248	118	2,922	1,703
July	333	251	1,073	80	340	0	651	466	38	3,233	1,757
August	348	274	1,082	61	377	0	321	523	84	3,070	1,765
September	336	154	1,477	96	371	0	323	359	149	3,264	2,063
October	242	147	1,342	90	427	0	412	389	172	3,220	1,820
November	210	132	1,270	112	353	0	517	535	56	3,184	1,724
December	176	122	1,045	158	400	0	684	411	132	3,129	1,502
AVERAGE	311	319	1,129	81	366	0	620	406	90	3,323	1,848
1982											
January	254	161	877	87	273	0	662	376	128	2,818	1,378
February	139	92	692	79	236	0	579	347	102	2,267	1,044
March	91	37	555	155	200	0	503	399	91	2,032	860
April	85	0	479	122	215	0	427	411	79	1,818	707
May	179	0	601	116	236	0	211	414	54	1,811	897
June	93	0	593	94	215	72	537	361	110	2,075	799
July	122	0	644	123	327	69	910	349	95	2,640	927
August	170	0	489	133	272	27	542	288	134	2,057	807
September	162	0	432	57	191	21	479	514	52	1,907	659
October	249	7	494	61	227	108	291	496	96	2,029	810
November	247	13	489	47	283	34	480	539	115	2,246	795
December	141	0	237	12	265	88	447	399	73	1,661	407
AVERAGE	161	26	548	91	245	35	505	408	94	2,113	840
1983											
January	204	0	282	47	255	43	186	324	43	1,384	533

¹ Excludes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil processed in OPEC countries.

² Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar.

³ Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait, and Qatar.

(^s) Less than 500 barrels.

Totals may not equal sum of components due to independent rounding.

Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil and Petroleum Product Imports from Non-OPEC Sources¹

	Bahamas	Canada	Mexico	Netherlands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico ²	Virgin Islands ²	Other	Total
	Thousand Barrels per Day									
1973										
AVERAGE	174	1,325	16	585	255	15	99	329	465	3,263
1974										
AVERAGE	164	1,070	8	511	251	8	90	391	340	2,832
1975										
AVERAGE	152	846	71	332	242	14	90	406	300	2,454
1976										
AVERAGE	118	599	87	275	274	31	88	422	353	2,247
1977										
AVERAGE	171	517	179	211	289	126	105	466	550	2,614
1978										
AVERAGE	160	467	318	229	253	180	94	429	484	2,613
1979										
AVERAGE	147	538	439	231	190	202	92	431	548	2,819
1980										
AVERAGE	78	455	533	225	176	176	88	388	491	2,609
1981										
January	39	543	401	198	150	233	89	494	552	2,701
February	84	546	437	227	163	271	46	481	626	2,881
March	74	472	488	227	93	263	45	370	571	2,603
April	68	412	418	198	139	402	40	365	380	2,423
May	122	365	522	213	105	368	58	344	474	2,573
June	51	353	538	196	124	397	67	262	525	2,513
July	77	382	384	212	178	553	50	206	541	2,583
August	69	378	489	255	123	592	68	184	539	2,698
September	111	423	708	163	169	528	72	265	661	3,100
October	63	449	669	161	121	351	60	303	562	2,739
November	63	547	628	168	108	253	76	294	421	2,557
December	70	501	587	148	125	280	73	367	563	2,714
AVERAGE	74	447	522	197	133	375	62	327	534	2,672
1982										
January	28	509	426	179	106	346	62	334	425	2,415
February	50	533	489	221	120	132	38	354	487	2,424
March	43	435	503	189	118	293	62	307	479	2,429
April	67	357	467	180	166	247	36	266	682	2,468
May	76	416	767	152	95	516	47	302	603	2,974
June	32	462	797	141	129	539	58	322	673	3,153
July	30	527	783	158	111	433	38	369	674	3,122
August	68	435	854	145	106	520	24	320	627	3,099
September	92	484	897	195	89	631	51	270	744	3,453
October	45	456	682	148	109	666	52	262	783	3,202
November	48	547	860	203	90	623	81	334	694	3,480
December	89	561	675	174	102	438	48	336	480	2,901
AVERAGE	56	477	684	173	112	451	50	315	613	2,928
1983										
January	68	536	849	218	73	315	40	299	588	2,988

¹ Includes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries.

² U.S. Possessions.

(s) Less than 500 barrels per day.

Totals may not equal sum of components due to independent rounding.

Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Sources

1. 1973 through 1976: Bureau of Mines, U.S. Department of the Interior, *Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual*, Mineral Industry Surveys.
2. 1977 through 1980: Energy Information Administration, U.S. Department of Energy, *Monthly Petroleum Statistics Report*, (unleaded gasoline category).
3. 1977 through 1980: Energy Information Administration, U.S. Department of Energy, *Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual*, Energy Data Reports.
4. January 1981 through December 1981: Energy Information Administration, U.S. Department of Energy, *Petroleum Supply Annual*.
5. January 1982 through January 1983: Detailed statistics in this issue. (See Explanatory Notes 9.1 through 9.6).
6. February 1983: Estimates based on EIA weekly data (except domestic crude oil production) (See Explanatory Note 1.1).
7. January 1982 through February 1983: Domestic crude oil production estimate based on historical statistics from State Conservation Agencies and the U.S. Geological Survey. (See Explanatory Note 3).



Detailed Statistics



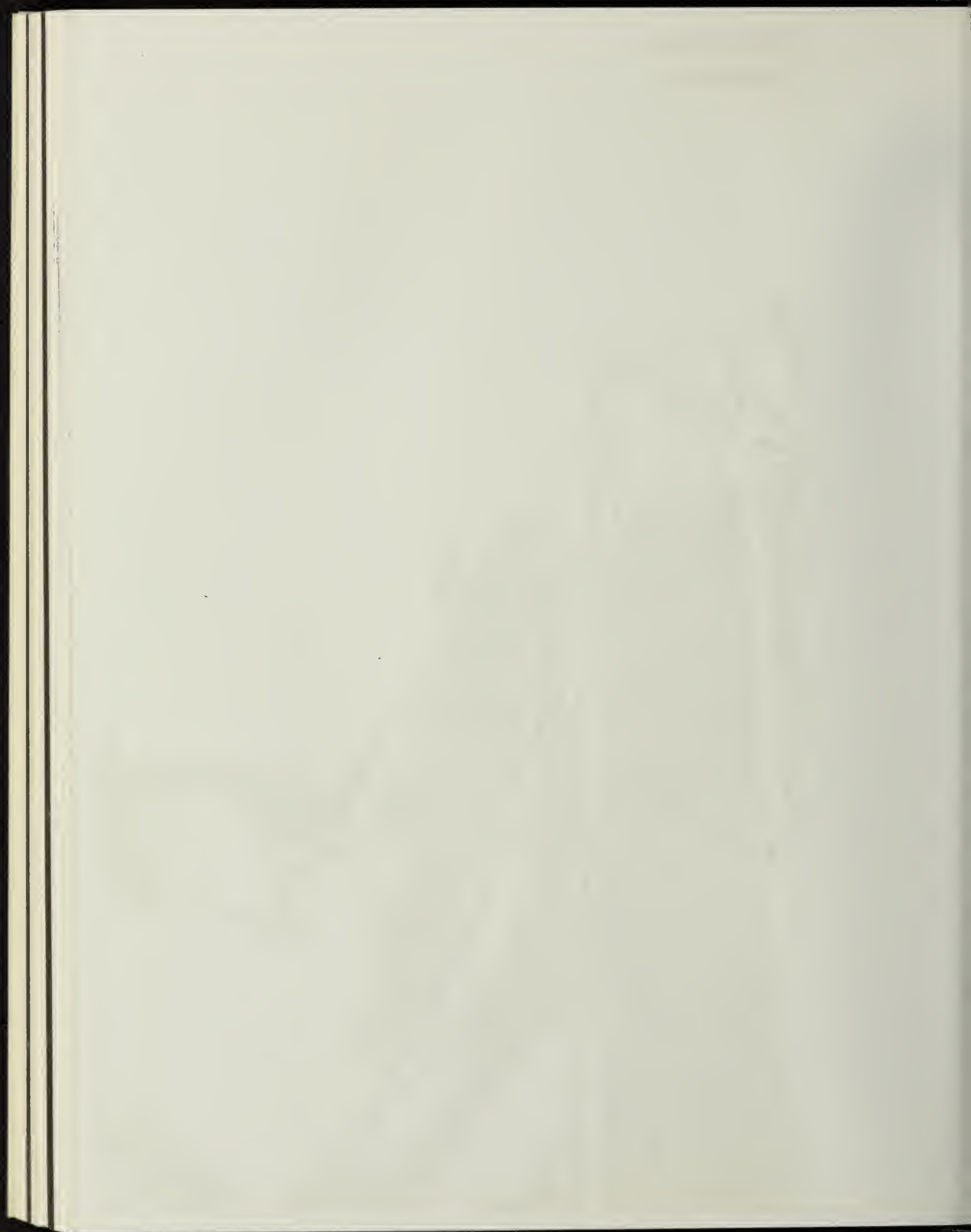


Table 1. U.S. Petroleum Balance, January 1983

	Current Month	
	Thousand Barrels	Thousand Barrels per Day
Crude Oil (Including Lease Condensate)		
Field Production		
(1) Alaska	E 52,641	1,698
(2) Lower 48 States	E 215,019	6,936
(3) Total U.S.	E 267,660	8,634
Net Imports		
(4) Imports (Gross Excluding SPR)	84,305	2,720
(5) SPR Imports	6,775	219
(6) Exports	3,625	117
(7) Imports (Net Including SPR)	87,455	2,821
Other Sources		
(8) SPR Withdrawal (+) or Addition (-)	-6,786	-219
(9) Other Stock Withdrawal (+) or Addition (-)	-10,806	-349
(10) Product Supplied and Losses	-1,732	-56
(11) Unaccounted for 1	7,369	238
(12) Total Other Sources	-11,955	-386
(13) Crude Input to Refineries	343,160	11,070
(13) = (3) + (7) + (12)		
Natural Gas Plant Liquids (NGPL)		
(14) Field Production	51,706	1,668
(15) Imports 2	484	16
(16) Stock Withdrawal (+) or Addition (-) 2	-394	-13
(17) Total NGPL Supply	51,796	1,671
Other Liquids		
Unfinished Oils and Gasoline Blending Components, Total		
(18) Stock Withdrawal (+) or Addition (-)	-5,917	-191
(19) Imports	6,299	203
(20) Other Hydrocarbons and Alcohol New Supply (Field Production)	1,669	54
(21) Refinery Processing Gain 1	14,791	477
(22) Crude Oil Product Supplied	1,672	54
(23) Total Other Liquids	18,514	597
(23) = (18) through (22)		
(24) Total Production of Products 3	413,470	13,338
(24) = (13) + (17) + (23)		
Net Imports of Refined Products 3		
(25) Imports (Gross)	37,666	1,215
(26) Exports	26,549	856
(27) Imports (Net)	11,117	359
(28) Total New Supply of Products	424,587	13,696
(28) = (24) + (27)		
(29) Refined Products Stock Withdrawal (+) or Addition (-) 3	33,125	1,069
(30) Total Petroleum Products Supplied for Domestic Use	457,712	14,765
(30) = (28) + (29)		
(31) Finished Motor Gasoline	185,415	5,981
(32) Distillate Fuel Oil	85,556	2,760
(33) Residual Fuel Oil	48,809	1,574
(34) Liquefied Petroleum Gases	64,737	2,088
(35) Other 4	71,524	2,307
(36) Crude Oil	1,672	54
(37) Total Product Supplied	457,712	14,765
(37) = (31) through (36)		
Ending Stocks, All Oils		
(38) Crude Oil and Lease Condensate (Excluding SPR)	360,850	--
(39) Strategic Petroleum Reserve (SPR)	300,613	--
(40) Unfinished Oils	110,275	--
(41) Gasoline Blending Components	43,464	--
(42) Natural Gasoline and Unfractionated Stream	11,862	--
(43) Finished Refined Products 3	625,731	--
(44) Total Stocks	1,452,795	--

1 A balancing item.

2 Includes isopentane, natural gasoline, unfractionated stream, and plant condensate only.

3 For products included see Explanatory Note 9.7.

4 Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil and liquefied petroleum gases.

E = Estimated.

-- Not Applicable.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1, 2, and 9.7.

Table 2. Supply and Disposition of Crude Oil and Petroleum Products, January 1983
(Thousands of Barrels)

Commodity	Supply				Disposition					
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 267,660	0	91,080	-17,592	7,369	60	343,160	3,625	1,672	661,463
Natural Gas Liquids and LRGs	51,370	8,482	7,916	18,751	0	0	16,132	3,663	66,724	95,435
Natural Gasoline and Isopentane	6,325	0	235	801	0	0	5,376	0	1,985	5,186
Unfractionated Stream	1,238	0	0	-1,157	0	0	81	0	0	5,196
Plant Condensate	778	0	249	-38	0	0	987	0	2	1,480
Liquefied Petroleum Gases	43,029	8,482	7,432	19,145	0	0	9,688	3,663	64,737	83,573
Ethane	8,339	213	2,109	2,050	0	0	51	(S)	12,660	3,921
Propane	15,886	8,136	2,085	11,847	0	0	120	2,078	35,756	46,390
Butane	6,426	143	2,399	3,891	0	0	4,630	1,585	6,644	12,791
Butane-Propane Mixtures	142	-21	839	727	0	0	239	0	1,448	1,398
Ethane-Propane Mixtures	9,231	0	0	-762	0	0	0	0	8,469	12,044
Isobutane	3,005	11	0	1,392	0	0	4,648	0	-240	7,029
Other Liquids	1,669	0	6,299	-5,917	0	0	11,241	0	-9,190	153,739
Other Hydrocarbons and Alcohol	1,669	0	0	2	0	0	1,671	0	0	309
Unfinished Oils	0	0	5,919	-4,998	0	0	6,055	0	-5,134	110,275
Motor Gasoline Blending Components	0	0	380	-865	0	0	2,874	0	-3,359	42,607
Aviation Gasoline Blending Components	0	0	0	-56	0	0	641	0	-697	548
Finished Petroleum Products	336	376,842	30,234	13,980	0	0	0	22,886	398,506	542,158
Finished Motor Gasoline	71	186,539	4,593	-5,774	0	0	0	14	185,415	208,311
Finished Leaded Motor Gasoline	59	83,029	2,499	-4,057	0	0	0	14	81,516	106,212
Finished Unleaded Motor Gasoline	12	103,510	2,094	-1,717	0	0	0	0	103,899	102,099
Finished Aviation Gasoline	32	642	(S)	-284	0	0	0	0	390	2,598
Naphtha-Type Jet Fuel	0	6,128	0	-425	0	0	0	(S)	5,703	7,614
Kerosene-Type Jet Fuel	0	25,040	830	-2,044	0	0	0	272	23,555	34,045
Kerosene	4	4,140	33	1,437	0	0	0	(S)	5,614	9,355
Distillate Fuel Oil	2	71,724	1,806	17,385	0	0	0	5,361	85,556	168,194
Residual Fuel Oil	0	28,990	21,410	7,534	0	0	0	9,125	48,809	60,695
Naphtha < 400 Deg. for Petro. Feed. Use	0	3,272	264	-62	0	0	0	65	3,409	2,029
Other Oils > 400 Deg. for Petro. Feed. Use	0	7,318	0	93	0	0	0	237	7,174	2,087
Special Naphthas	47	1,377	570	190	0	0	0	42	2,142	3,284
Lubricants	0	4,224	288	-824	0	0	0	419	3,269	14,005
Waxes	0	399	59	-2	0	0	0	21	435	788
Petroleum Coke	0	12,640	0	-315	0	0	0	7,231	5,094	7,036
Asphalt and Road Oil	0	6,365	16	-2,638	0	0	0	60	3,683	19,907
Still Gas	0	15,943	0	0	0	0	0	0	15,943	0
Miscellaneous Products	180	2,101	364	-291	0	0	0	39	2,315	2,210
Total	321,035	385,324	135,528	9,222	7,369	60	370,533	30,174	457,712	1,452,795

¹ Unaccounted for crude oil is a balancing item.

(S) Less than 500 Barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 3. Year-to-Date Supply and Disposition Statistics of Crude Oil and Petroleum Products, January 1983
(Thousands of Barrels)

Commodity	Supply			Disposition					Ending Stocks	
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports		Products Supplied
Crude Oil (including lease condensate)	E 267,660	0	91,080	-17,592	7,369	60	343,160	3,625	1,672	661,463
Natural Gas Liquids and LRGs	51,370	8,482	7,916	18,751	0	0	16,132	3,663	66,724	95,435
Natural Gasoline and Isopentane	6,325	0	235	801	0	0	5,376	0	1,985	5,186
Unfractionated Stream	1,238	0	0	-1,157	0	0	81	0	0	5,196
Plant Condensate	778	0	249	-38	0	0	987	0	2	1,480
Liquefied Petroleum Gases	43,029	8,482	7,432	19,145	0	0	9,688	3,663	64,737	83,573
Ethane	8,339	213	2,109	2,050	0	0	51	(s)	12,660	3,921
Propane	15,886	8,136	2,085	11,847	0	0	120	2,078	35,756	46,390
Butane	6,426	143	2,399	3,891	0	0	4,630	1,585	6,644	12,791
Butane-Propane Mixtures	142	-21	839	727	0	0	239	0	1,448	1,398
Ethane-Propane Mixtures	9,231	0	0	-762	0	0	0	0	8,469	12,044
Isobutane	3,005	11	0	1,392	0	0	4,648	0	-240	7,029
Other Liquids	1,669	0	6,299	-5,917	0	0	11,241	0	-9,190	153,739
Other Hydrocarbons and Alcohol	1,669	0	0	2	0	0	1,671	0	0	309
Unfinished Oils	0	0	5,919	-4,998	0	0	6,055	0	-5,134	110,275
Motor Gasoline Blending Components	0	0	380	-865	0	0	2,874	0	-3,359	42,607
Aviation Gasoline Blending Components	0	0	0	-56	0	0	641	0	-697	548
Finished Petroleum Products	336	376,842	30,234	13,980	0	0	0	22,886	398,506	542,158
Finished Motor Gasoline	71	186,539	4,593	-5,774	0	0	0	14	185,415	208,311
Finished Leaded Motor Gasoline	59	83,029	2,499	-4,057	0	0	0	14	81,516	106,212
Finished Unleaded Motor Gasoline	12	103,510	2,094	-1,717	0	0	0	0	103,899	102,099
Finished Aviation Gasoline	32	642	(s)	-284	0	0	0	0	390	2,598
Naphtha-Type Jet Fuel	0	6,128	0	-425	0	0	0	(s)	5,703	7,614
Kerosene-Type Jet Fuel	0	25,040	830	-2,044	0	0	0	272	23,555	34,045
Kerosene	4	4,140	33	1,437	0	0	0	(s)	5,614	9,355
Distillate Fuel Oil	2	71,724	1,806	17,385	0	0	0	5,361	85,556	168,194
Residual Fuel Oil	0	28,990	21,410	7,534	0	0	0	9,125	48,809	60,695
Naphtha < 400 Deg. for Petro. Feed. Use	0	3,272	264	-62	0	0	0	65	3,409	2,029
Other Oils > 400 Deg. for Petro. Feed. Use	0	7,318	0	93	0	0	0	237	7,174	2,087
Special Naphthas	47	1,377	570	190	0	0	0	42	2,142	3,284
Lubricants	0	4,224	288	-824	0	0	0	419	3,269	14,005
Waxes	0	399	59	-2	0	0	0	21	435	788
Petroleum Coke	0	12,640	0	-315	0	0	0	7,231	5,094	7,036
Asphalt and Road Oil	0	6,365	16	-2,638	0	0	0	60	3,683	19,907
Still Gas	0	15,943	0	0	0	0	0	0	15,943	0
Miscellaneous Products	180	2,101	364	-291	0	0	0	39	2,315	2,210
Total	321,035	385,324	135,528	9,222	7,369	60	370,533	30,174	457,712	1,452,795

¹ Unaccounted for crude oil is a balancing item.

(s) Less than 500 barrels or less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January 1983
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) Addition (-)	Unaccounted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 8,634	0	2,938	-567	238	2	11,070	117	54
Natural Gas Liquids and LRGs	1,657	274	255	605	0	0	520	118	2,152
Natural Gasoline and Isopentane	204	0	8	26	0	0	173	0	64
Unfractionated Stream	40	0	0	-37	0	0	3	0	0
Plant Condensate	25	0	8	-1	0	0	32	0	(s)
Liquefied Petroleum Gases	1,388	274	240	618	0	0	313	118	2,088
Ethane	269	7	68	66	0	0	2	(s)	408
Propane	512	262	67	382	0	0	149	51	1,153
Butane	207	5	77	126	0	0	8	0	214
Butane-Propane Mixtures	5	-1	27	23	0	0	0	0	47
Ethane-Propane Mixtures	298	0	0	-25	0	0	0	0	273
Isobutane	97	(s)	0	45	0	0	150	0	-8
Other Liquids	54	0	203	-191	0	0	363	0	-296
Other Hydrocarbons and Alcohol	54	0	0	(s)	0	0	54	0	0
Unfinished Oils	0	0	191	-161	0	0	195	0	-166
Motor Gasoline Blending Components	0	0	12	-28	0	0	93	0	-108
Aviation Gasoline Blending Components	0	0	0	-2	0	0	21	0	-22
Finished Petroleum Products	11	12,156	975	451	0	0	0	738	12,855
Finished Motor Gasoline	2	6,017	148	-186	0	0	0	(s)	5,981
Finished Leaded Motor Gasoline	2	2,678	81	-131	0	0	0	(s)	2,630
Finished Unleaded Motor Gasoline	(s)	3,339	68	-55	0	0	0	0	3,352
Finished Aviation Gasoline	1	21	(s)	-9	0	0	0	0	13
Naphtha-Type Jet Fuel	0	198	0	-14	0	0	0	(s)	184
Kerosene-Type Jet Fuel	0	808	27	-66	0	0	0	9	760
Kerosene	(s)	134	1	46	0	0	0	(s)	181
Distillate Fuel Oil	0	2,314	58	561	0	0	0	173	2,760
Residual Fuel Oil	0	935	691	243	0	0	0	294	1,574
Naphtha < 400 Deg. for Petro. Feed. Use	0	106	9	-2	0	0	0	2	110
Other Oils > 400 Deg. for Petro. Feed. Use	0	236	0	3	0	0	0	8	231
Special Naphthas	2	44	18	6	0	0	0	1	69
Lubricants	0	136	9	-27	0	0	0	14	105
Waxes	0	13	2	(s)	0	0	0	1	14
Petroleum Coke	0	408	0	-10	0	0	0	233	164
Asphalt and Road Oil	0	205	1	-85	0	0	0	2	119
Still Gas	0	514	0	0	0	0	0	0	514
Miscellaneous Products	6	68	12	-9	0	0	0	1	75
Total	10,356	12,430	4,372	297	238	2	11,953	973	14,765

¹ Unaccounted for crude oil is a balancing item.

(s) Less than 500 barrels per day.

E = Estimated.

NOTE: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January 1983
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Stock With-drawal(+) Addi-tion(-)	Unac-counted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (Including lease condensate)	E 8,634	0	2,938	-567	238	2	11,070	117	54
Natural Gas Liquids and LRGs	1,657	274	255	605	0	0	520	118	2,152
Natural Gasoline and Isopentane	204	0	8	26	0	0	173	0	64
Unfractionated Stream	40	0	0	-37	0	0	3	0	0
Plant Condensate	25	0	8	-1	0	0	32	0	(s)
Liquefied Petroleum Gases	1,388	274	240	618	0	0	313	118	2,088
Ethane	269	7	68	66	0	0	2	(s)	408
Propane	512	262	67	382	0	0	4	67	1,153
Butane	207	5	77	126	0	0	149	51	214
Butane-Propane Mixtures	5	-1	27	23	0	0	8	0	47
Ethane-Propane Mixtures	298	0	0	-25	0	0	0	0	273
Isobutane	97	(s)	0	45	0	0	150	0	-8
Other Liquids	54	0	203	-191	0	0	363	0	-296
Other Hydrocarbons and Alcohol	54	0	0	(s)	0	0	54	0	0
Unfinished Oils	0	0	191	-161	0	0	195	0	-166
Motor Gasoline Blending Components	0	0	12	-28	0	0	93	0	-108
Aviation Gasoline Blending Components	0	0	0	-2	0	0	21	0	-22
Finished Petroleum Products	11	12,156	975	451	0	0	0	738	12,855
Finished Motor Gasoline	2	6,017	148	-186	0	0	0	(s)	5,981
Finished Leaded Motor Gasoline	2	2,678	81	-131	0	0	0	(s)	2,630
Finished Unleaded Motor Gasoline	(s)	3,339	68	-55	0	0	0	0	3,352
Finished Aviation Gasoline	1	21	(s)	-9	0	0	0	0	13
Naphtha-Type Jet Fuel	0	198	0	-14	0	0	0	(s)	184
Kerosene-Type Jet Fuel	0	808	27	-66	0	0	0	(s)	760
Kerosene	(s)	134	1	46	0	0	0	(s)	181
Distillate Fuel Oil	(s)	2,314	58	561	0	0	0	(s)	2,760
Residual Fuel Oil	0	935	691	243	0	0	0	173	1,574
Naphtha < 400 Deg. for Petro. Feed. Use	0	106	9	-2	0	0	0	294	110
Other Oils > 400 Deg. for Petro. Feed. Use	0	236	0	3	0	0	0	2	231
Special Naphthas	2	44	18	6	0	0	0	8	69
Lubricants	0	136	9	-27	0	0	0	1	105
Waxes	0	13	2	(s)	0	0	0	14	14
Petroleum Coke	0	408	0	-10	0	0	0	1	164
Asphalt and Road Oil	0	205	1	-85	0	0	0	233	119
Still Gas	0	514	0	0	0	0	0	2	514
Miscellaneous Products	6	68	12	-9	0	0	0	1	75
Total	10,356	12,430	4,372	297	238	2	11,953	973	14,765

¹ Unaccounted for crude oil is a balancing item.

(s) Less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 6. PAD District I, Supply and Disposition of Crude Oil and Petroleum Products, January 1983
(Thousands of Barrels)

Commodity	Supply				Disposition						Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 2,613	0	26,237	16	474	3,382	0	32,722	0	0	17,534
Natural Gas Liquids and LRGs	1,095	1,351	414	668	0	3,724	0	248	32	6,972	5,549
Liquefied Petroleum Gases	797	1,351	414	681	0	3,724	0	233	32	6,702	5,508
Other Products ²	298	0	0	-13	0	0	0	15	0	270	41
Other Liquids	83	0	2,715	1,291	0	255	0	4,945	0	-601	17,760
Other Hydrocarbons and Alcohol	83	0	0	36	0	0	0	119	0	0	73
Unfinished Oils	0	0	2,662	899	0	255	0	4,273	0	-457	12,757
Motor Gasoline Blending Components	0	0	54	351	0	0	0	553	0	-148	4,930
Aviation Gasoline Blending Components	0	0	0	5	0	0	0	0	0	5	0
Finished Petroleum Products	38	38,882	25,653	19,464	0	74,561	0	0	2,148	156,450	191,771
Finished Motor Gasoline	38	19,313	3,761	-889	0	42,909	0	0	1	65,131	65,005
Finished Leaded Motor Gasoline	35	7,587	1,895	-2,824	0	17,812	0	0	1	24,504	32,840
Finished Unleaded Motor Gasoline	3	11,726	1,866	1,935	0	25,097	0	0	0	40,627	32,165
Finished Aviation Gasoline	0	17	(s)	-19	0	174	0	0	0	172	447
Naphtha-Type Jet Fuel	0	554	0	347	0	315	0	0	(s)	1,216	1,037
Kerosene-Type Jet Fuel	0	766	830	-45	0	7,747	0	0	0	9,298	9,671
Kerosene	0	353	33	1,469	0	831	0	0	(s)	2,685	3,957
Distillate Fuel Oil	0	8,602	1,517	13,563	0	17,342	0	0	528	40,496	71,118
Residual Fuel Oil	0	4,414	19,094	5,817	0	3,313	0	0	671	31,968	29,869
Naphtha and Other Oils for Petrochem.											
Feedstock	0	330	8	-36	0	84	0	0	45	342	143
Special Naphthas	0	25	124	10	0	456	0	0	3	612	883
Lubricants	0	616	231	-86	0	464	0	0	215	1,009	3,596
Waxes	0	71	50	10	0	0	0	0	6	125	184
Petroleum Coke	0	1,150	0	-53	0	0	0	0	610	487	854
Asphalt and Road Oil	0	598	2	-465	0	239	0	0	57	317	4,411
Still Gas	0	1,655	0	0	0	0	0	0	0	1,655	0
Miscellaneous Products	0	418	2	-159	0	687	0	0	12	936	596
Total	3,829	40,233	55,020	21,439	474	81,922	0	37,915	2,180	162,822	232,614

¹ Unaccounted for crude oil is a balancing item.² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 7. PAD District II Supply and Disposition of Crude Oil and Petroleum Products, January 1983
(Thousands of Barrels)

Commodity	Supply				Net Receipts	Disposition					
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)		Crude Losses	Refinery Inputs	Exports	Products Supplied		
Crude Oil (including lease condensate)	E 31,989	0	13,363	374	37,530	1,563	5	83,147	1,667	0	78,182
Natural Gas Liquids and LRGs	10,138	2,508	5,052	3,283	0	5,068	0	5,996	1,696	18,357	30,331
Liquefied Petroleum Gases	11,383	2,508	4,892	1,583	0	3,389	0	4,298	1,696	17,761	27,377
Other Products2	-1,245	0	159	1,700	0	1,679	0	1,698	0	595	2,954
Other Liquids	157	0	588	992	0	801	0	2,779	0	-241	26,243
Other Hydrocarbons and Alcohol	157	0	0	-32	0	0	0	125	0	0	102
Unfinished Oils	0	0	282	911	0	9	0	763	0	439	16,873
Motor Gasoline Blending Components	0	0	306	87	0	792	0	1,189	0	-4	9,145
Aviation Gasoline Blending Components	0	0	0	26	0	0	0	702	0	-676	123
Finished Petroleum Products	14	93,423	496	-9,803	0	14,597	0	0	112	98,615	145,811
Finished Motor Gasoline	0	55,516	138	-8,237	0	9,549	0	0	(s)	56,966	66,140
Finished Leaded Motor Gasoline	0	27,155	136	-3,677	0	5,059	0	0	(s)	28,672	35,052
Finished Unleaded Motor Gasoline	0	28,361	2	-4,560	0	4,490	0	0	0	28,293	31,088
Finished Aviation Gasoline	0	101	0	-93	0	72	0	0	0	80	635
Naphtha-Type Jet Fuel	0	872	0	-411	0	176	0	0	(s)	637	1,721
Kerosene-Type Jet Fuel	0	4,165	0	-515	0	1,576	0	0	0	5,226	7,825
Kerosene	0	911	0	23	0	131	0	0	0	1,065	2,766
Distillate Fuel Oil	0	17,802	11	1,016	0	3,137	0	0	1	21,965	47,205
Residual Fuel Oil	0	3,220	255	394	0	-291	0	0	0	3,578	4,989
Naphtha and Other Oils for Petro. Feed,	0	471	5	59	0	2	0	0	61	476	309
Special Naphthas	0	392	74	19	0	84	0	0	1	568	611
Lubricants	0	740	4	-192	0	72	0	0	9	615	2,669
Waxes	0	61	3	-8	0	0	0	0	87	56	87
Petroleum Coke	0	3,227	0	-106	0	0	0	0	37	3,084	2,080
Asphalt and Road Oil	0	2,231	3	-1,679	0	179	0	0	1	732	8,572
Still Gas	0	3,540	0	0	0	0	0	0	0	3,540	0
Miscellaneous Products	14	174	3	-73	0	-90	0	0	1	27	202
Total	42,298	95,931	19,499	-5,154	37,530	22,029	5	91,922	3,475	116,730	280,567

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(S) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 8. PAD District III Supply and Disposition of Crude Oil and Petroleum Products, January 1983
(Thousands of Barrels)

Commodity	Supply				Disposition					Ending Stocks	
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs	Exports		Products Supplied
Crude Oil (including lease condensate)	E 128,563	0	44,407	-11,116	-23,134	14,664	25	153,350	0	9	464,813
Natural Gas Liquids and LRGs	36,777	3,494	839	13,954	0	-8,384	0	8,071	1,732	36,876	56,440
Liquefied Petroleum Gases	29,254	3,494	839	15,531	0	-7,391	0	3,814	1,732	36,180	48,391
Other Products ²	7,523	0	0	-1,577	0	-993	0	4,257	0	696	8,049
Other Liquids	937	0	2,717	-5,138	0	-1,056	0	4,328	0	-6,868	68,624
Other Hydrocarbons and Alcohol	937	0	0	-1	0	0	0	936	0	0	128
Unfinished Oils	0	0	2,717	-5,081	0	-264	0	1,479	0	-4,107	51,290
Motor Gasoline Blending Components	0	0	0	34	0	-792	0	1,977	0	-2,735	16,800
Aviation Gasoline Blending Components	0	0	0	-90	0	0	0	-64	0	-26	406
Finished Petroleum Products	247	166,718	2,755	5,279	0	-92,123	0	0	12,252	70,624	128,198
Finished Motor Gasoline	0	76,642	(\$)	3,030	0	-54,317	0	0	(\$)	25,355	48,152
Finished Leaded Motor Gasoline	0	32,049	(\$)	1,666	0	-23,801	0	0	(\$)	23,938	9,914
Finished Unleaded Motor Gasoline	0	44,593	0	1,364	0	-30,516	0	0	0	15,441	24,214
Finished Aviation Gasoline	32	330	0	-104	0	-246	0	0	0	12	767
Naphtha-Type Jet Fuel	0	3,031	0	-303	0	-597	0	0	0	2,131	2,670
Kerosene-Type Jet Fuel	0	12,578	0	-376	0	-10,217	0	0	0	1,750	9,380
Kerosene	4	2,632	0	-1	0	-962	0	0	0	1,673	2,389
Distillate Fuel Oil	2	31,650	30	3,202	0	-20,812	0	0	3,762	10,310	31,719
Residual Fuel Oil	0	12,077	1,746	378	0	-2,696	0	0	4,632	16,320	16,320
Naphtha and Other Oils for Petro. Feed.	0	9,304	222	-209	0	-86	0	0	76	9,155	3,066
Special Naphthas	47	927	355	112	0	-540	0	0	35	866	1,565
Lubricants	0	2,452	53	-496	0	-635	0	0	149	1,225	6,370
Waxes	0	210	0	-10	0	0	0	0	11	189	456
Petroleum Coke	0	4,607	0	180	0	0	0	0	3,328	1,459	749
Asphalt and Road Oil	0	2,252	0	-46	0	-418	0	0	(\$)	1,788	3,476
Still Gas	0	6,706	0	0	0	0	0	0	0	6,706	0
Miscellaneous Products	162	1,320	349	-78	0	-597	0	0	24	1,133	1,119
Total	166,524	170,212	50,718	2,979	-23,134	-86,899	25	165,749	13,985	100,641	718,075

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(S) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 9. PAD District IV Supply and Disposition of Crude Oil and Petroleum Products, January 1983
(Thousands of Barrels)

Commodity	Supply				Disposition				Ending Stocks		
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs		Exports	Products Supplied
Crude Oil (including lease condensate)	E 17,004	0	1,507	-1,593	-4,513	0	0	12,405	0	0	15,084
Natural Gas Liquids and LRGs	2,439	91	712	116	0	-408	0	545	(s)	2,405	1,139
Liquefied Petroleum Gases	1,011	91	623	437	0	278	0	355	(s)	2,084	556
Other Products ²	1,428	0	90	-321	0	-686	0	190	0	321	583
Other Liquids	71	0	0	-454	0	0	0	-565	0	182	5,613
Other Hydrocarbons and Alcohol	71	0	0	0	0	0	0	71	0	0	0
Unfinished Oils	0	0	0	22	0	0	0	-413	0	435	2,664
Motor Gasoline Blending Components	0	0	0	-476	0	0	0	-223	0	-253	2,949
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0
Finished Petroleum Products	37	12,475	10	-771	0	138	0	0	3	11,887	15,031
Finished Motor Gasoline	33	6,606	0	-380	0	49	0	0	0	6,308	6,466
Finished Leaded Motor Gasoline	24	4,181	0	-262	0	-214	0	0	0	3,729	4,216
Finished Unleaded Motor Gasoline	9	2,425	0	-118	0	263	0	0	0	2,579	2,250
Finished Aviation Gasoline	0	18	0	10	0	0	0	0	0	28	57
Naphtha-Type Jet Fuel	0	421	0	-32	0	-115	0	0	0	274	381
Kerosene-Type Jet Fuel	0	581	0	-44	0	620	0	0	0	1,157	682
Kerosene	0	74	0	4	0	0	0	0	0	78	38
Distillate Fuel Oil	0	3,142	0	-40	0	-416	0	0	0	2,686	4,091
Residual Fuel Oil	0	313	9	92	0	0	0	0	0	414	542
Naphtha and Other Oils for Petro. Feed.	0	0	0	0	0	0	0	0	2	-2	0
Special Naphthas	0	2	(s)	0	0	0	0	0	0	9	2
Lubricants	0	33	(s)	-9	0	0	0	0	1	24	93
Waxes	0	5	0	2	0	0	0	0	0	7	8
Petroleum Coke	0	319	0	-37	0	0	0	0	0	282	813
Asphalt and Road Oil	0	438	0	-337	0	0	0	0	(s)	101	1,850
Still Gas	0	497	0	0	0	0	0	0	0	497	0
Miscellaneous Products	4	26	(s)	0	0	0	0	0	(s)	30	1
Total	19,551	12,566	2,230	-2,702	-4,513	-270	0	12,385	3	14,473	36,867

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unrefractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 10. PAD District V Supply and Disposition of Crude Oil and Petroleum Products, January 1983
(Thousands of Barrels)

Commodity	Supply				Disposition						
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 87,491	0	5,564	-5,273	-2,986	-19,609	30	61,536	1,958	1,663	85,850
Natural Gas Liquids and LRGs	921	1,038	899	730	0	0	0	1,272	202	2,114	1,976
Liquefied Petroleum Gases	584	1,038	664	913	0	0	0	988	202	2,008	1,741
Other Products ²	337	0	235	-183	0	0	0	284	0	105	235
Other Liquids	421	0	279	-2,608	0	0	0	-246	0	-1,662	35,499
Other Hydrocarbons and Alcohol	421	0	0	-1	0	0	0	420	0	0	6
Unfinished Oils	0	0	258	-1,749	0	0	0	-47	0	-1,444	26,691
Motor Gasoline Blending Components	0	0	20	-861	0	0	0	-622	0	-219	8,783
Aviation Gasoline Blending Components	0	0	0	3	0	0	0	3	0	0	19
Finished Petroleum Products	0	65,344	1,320	-189	0	2,827	0	0	8,371	60,931	61,347
Finished Motor Gasoline	0	28,462	693	702	0	1,810	0	0	12	31,655	22,548
Finished Leaded Motor Gasoline	0	12,057	468	1,040	0	1,144	0	0	12	14,697	10,166
Finished Unleaded Motor Gasoline	0	16,405	225	-338	0	666	0	0	0	16,958	12,382
Finished Aviation Gasoline	0	176	0	-78	0	0	0	0	0	98	692
Naphtha-Type Jet Fuel	0	1,250	0	-26	0	221	0	0	0	1,445	1,805
Kerosene-Type Jet Fuel	0	6,950	0	-1,064	0	274	0	0	37	6,123	6,487
Kerosene	0	170	1	-58	0	0	0	0	(s)	113	205
Distillate Fuel Oil	0	10,528	248	-356	0	749	0	0	1,071	10,099	14,061
Residual Fuel Oil	0	8,966	305	853	0	-326	0	0	3,822	5,976	8,975
Naphtha and Other Oils for Petro. Feed.	0	485	29	217	0	0	0	0	119	612	598
Special Naphthas	0	31	16	49	0	0	0	0	3	94	216
Lubricants	0	383	(s)	-41	0	99	0	0	44	397	1,277
Waxes	0	52	6	4	0	0	0	0	4	58	53
Petroleum Coke	0	3,337	0	-299	0	0	0	0	3,256	-218	2,540
Asphalt and Road Oil	0	846	11	-111	0	0	0	0	1	745	1,598
Still Gas	0	3,545	0	0	0	0	0	0	0	3,545	0
Miscellaneous Products	0	163	10	19	0	0	0	0	2	189	292
Total	88,833	66,382	8,062	-7,340	-2,986	-16,782	30	62,562	10,531	63,046	184,672

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 11. Production of Crude Oil (Including Lease Condensate) by PAD District and State, for the Most Current Available Month, 1 November 1982
(Thousands of Barrels)

PAD District and State	Production	
	Total	Daily Average
PAD District I		
Florida	1,878	63
New York	E 69	2
Pennsylvania	E 306	10
Virginia	0	0
West Virginia	E 285	10
Adjustment 2	113	4
Total PAD District I	E 2,651	88
PAD District II		
Illinois	2,460	82
Indiana	E 388	13
Kansas	5,844	195
Kentucky	E 538	18
Michigan	2,633	88
Missouri	E 19	1
Nebraska	552	18
North Dakota	4,112	137
Ohio	E 1,114	37
Oklahoma	13,205	440
South Dakota	89	3
Tennessee	96	3
Adjustment 2	249	8
Total PAD District II	E 31,299	1,043
PAD District III		
Alabama	1,714	57
Arkansas	E 1,549	52
Louisiana		
Gulf Coast	35,788	1,193
Rest Of State	2,916	97
Total Louisiana	38,704	1,290
Mississippi	2,669	89
New Mexico		
Northwestern	517	17
Southeastern	5,514	184
Total New Mexico	6,031	201
Texas		
TRRC District 01	2,034	68
TRRC District 02	3,391	113
TRRC District 03	11,091	370
TRRC District 04	2,294	76
TRRC District 05	653	22
TRRC District 06, excluding East Texas	4,308	144
TRRC District 07B	2,746	92
TRRC District 07C	3,072	102
TRRC District 08	18,909	630
TRRC District 08A	19,278	643
TRRC District 09	3,173	106
TRRC District 10	1,690	56
East Texas	3,441	115
Total Texas	76,080	2,536
Adjustment 2	-495	-17
Total PAD District III	E 126,252	4,208

PAD District and State	Production	
	Total	Daily Average
PAD District IV		
Colorado	E 2,493	83
Montana	2,518	84
Utah	E 1,949	65
Wyoming	E 9,863	329
Adjustment 2	264	9
Total PAD District IV	E 17,087	570
PAD District V		
Alaska		
South Alaska	2,240	75
North Slope	48,032	1,601
Adjustment for Alaska ²	-277	-9
Total Alaska	49,995	1,666
Arizona	26	1
California		
Central Coastal	6,417	214
East Central	20,306	677
North	16	1
South	6,479	216
Total California	33,218	1,107
Nevada	58	2
Adjustment for Arizona, California, and Nevada ²	124	4
Total PAD District V	83,421	2,781
United States Total	E 260,710	8,690

¹ Includes the following offshore production (thousands of barrels):

Alaska: 1,960;

California: Federal- 2,456, State- 3,164;

Louisiana: Federal- 23,370, State- 2004;

Texas: Federal- 1,584, State- 131;

U.S. Total- 34,669.

² These adjustments are used to reconcile the national and PADD level sums of the State data with the independently estimated U.S. and Alaskan figures shown in the Summary Statistics portion of this issue and with the PADD level figures published in a previous issue. Final data at the State, PAD District and national levels will be published without adjustments in the Petroleum Supply Annual.

Sources: See Explanatory Notes on Data Collection and Estimation.

E = Estimated.

Table 12. Natural Gas Processing Plant Production of Petroleum Products by PAD District, January 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		PAD District V		United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La., Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Natural Gas Liquids	586	509	1,095	2	2,221	428	7,487	10,138	21,314	3,022	7,924	799	3,718	36,777	2,439	921	51,370
Natural Gasoline and Isopentane	83	34	117	0	75	68	1,517	1,660	2,006	184	1,243	122	295	3,850	380	318	6,325
Unfractionated Stream	40	141	181	2	898	75	-3,988	-3,013	9,555	-9,999	771	369	2,347	3,043	1,008	19	1,238
Plant Condensate	0	0	0	0	41	24	43	108	272	382	26	-58	8	630	40	0	778
Liquefied Petroleum Gases	463	334	797	0	1,207	261	9,915	11,383	9,481	12,455	5,884	366	1,068	29,254	1,011	584	43,029
Ethane	155	174	329	0	482	0	1,373	1,855	778	3,049	2,142	42	87	6,098	57	0	8,339
Propane	188	108	296	0	499	159	3,360	4,018	4,619	3,490	1,870	146	516	10,641	584	347	15,886
Butane	101	34	135	0	98	90	1,385	1,573	1,406	1,768	705	97	247	4,223	311	184	6,426
Butane-Propane Mixtures	0	0	0	0	1	0	6	7	45	35	1	16	0	97	0	38	142
Ethane-Propane Mixtures	0	0	0	0	66	0	3,236	3,302	2,049	3,146	584	6	139	5,924	0	5	9,231
Isobutane	19	18	37	0	61	12	555	628	584	967	582	59	79	2,271	59	10	3,005
Finished Petroleum Products	38	0	38	0	2	0	12	14	221	4	3	15	4	247	37	0	336
Finished Motor Gasoline	35	0	35	0	0	0	0	0	0	0	0	0	0	0	0	0	71
Finished Leaded Motor Gasoline	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	59
Finished Unleaded Motor Gasoline	0	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0	12
Finished Aviation Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
Naphtha-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4
Distillate Fuel Oil	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
Special Naphthas	0	0	0	0	0	0	0	0	47	0	0	0	0	0	0	0	47
Miscellaneous Products	0	0	0	0	0	0	12	14	139	4	3	15	1	162	4	0	180
Total Production	624	509	1,133	2	2,223	428	7,499	10,152	21,535	3,026	7,927	814	3,722	37,024	2,476	921	51,706

¹ Production represents quantity of natural gas processing plant output less input to fractionating facilities.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 13. Refinery Input of Crude Oil and Petroleum Products by PAD District, January 1983
(Thousands of Barrels, Except Where Noted)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Dist. IV Rocky Mts.	Dist. V West Coast
Crude Oil (including lease condensate)	30,678	2,044	32,722	1,549	54,241	7,372	19,985	83,147	13,721	77,377	55,218	4,755	2,279	153,350	12,405	61,536
343,160																
Natural Gas Liquids																
Natural Gasoline and Isopentane	15	0	15	0	409	245	920	1,574	1,065	1,734	415	65	95	3,374	129	284
Unfractionated Stream	0	0	0	0	0	0	0	0	0	81	0	0	0	81	0	81
Plant Condensate	0	0	0	0	107	0	17	124	63	506	0	230	3	802	61	987
Liquefied Petroleum Gases	213	20	233	168	2,654	366	1,110	4,298	567	1,500	1,577	95	75	3,814	355	988
Ethane	0	0	0	0	1	0	0	1	0	10	40	0	0	50	0	51
Propane	0	0	0	0	61	0	0	61	0	0	51	0	0	51	8	120
Butane	10	0	10	94	1,706	313	700	2,813	281	134	372	8	13	808	205	794
Butane-Propane Mixtures	0	0	0	0	1	0	0	1	0	131	0	0	31	162	76	239
Ethane-Propane Mixtures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Isobutane	203	20	223	74	885	53	410	1,422	286	1,225	1,114	87	31	2,743	66	194
4,648																
Other Liquids																
Other Hydrocarbons and Alcohol	119	0	119	0	112	0	13	125	12	735	189	0	0	936	71	420
Unfinished Oil (net)	4,151	122	4,273	35	2	9	717	763	205	3,586	-2,704	318	74	1,479	-413	-47
Motor Gasoline Blending																
Components (net)	583	-30	553	0	1,405	-260	44	1,189	-585	706	1,956	-85	-15	1,977	-223	-622
Aviation Gasoline Blending																
Components (net)	0	0	0	0	29	0	673	702	-23	-32	-9	0	0	-64	0	3
641																
Total Input to Refineries	35,759	2,156	37,915	1,752	58,959	7,732	23,479	91,922	15,025	86,193	56,642	5,378	2,511	165,749	12,385	62,562
370,533																
Crude Oil Distillation																
Gross Input (daily average)	1,008	66	1,074	56	1,790	253	668	2,768	467	2,602	1,834	164	74	5,142	405	2,035
Operable Capacity (daily average)	1,473	176	1,650	66	2,344	302	847	3,558	618	4,143	2,718	299	106	7,884	583	3,151
Operating Ratio (percent) ¹	68.4	37.6	65.1	85.5	76.4	83.9	79.0	77.8	75.6	62.8	67.5	54.8	70.1	65.2	69.4	64.6
67.9																
Crude Oil Qualities																
Sulfur Content, Weighted Average (percent)	1.00	.25	.95	.76	.89	1.69	.64	.90	.58	.93	.69	1.46	.33	.82	.89	1.00
API Gravity, Weighted Average	31.85	40.81	32.46	35.77	30.93	25.71	36.68	31.95	36.89	31.80	34.39	33.54	39.92	33.35	31.44	25.13
31.36																
Operable Capacity (daily average)	1,473	176	1,650	66	2,344	302	847	3,558	618	4,143	2,718	299	106	7,884	583	3,151
Operating	1,261	112	1,374	66	2,150	302	782	3,300	603	3,406	2,407	206	101	6,723	572	2,930
Idle	212	64	276	0	194	0	64	258	15	737	311	93	4	1,161	11	220
1,926																

¹ Represents gross input divided by operable capacity.

Note: Total may not equal sum of components due to independent rounding.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 14. Refinery Production of Petroleum Products by PAD District, January 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II				PAD District III				Total		PAD Dist. IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Coast	No. La., Ark.	New Mexico	Rocky Mt.	Dist. V West Coast		
Liquefied Refinery Gases	1,341	10	1,351	39	1,697	260	512	2,508	221	2,286	825	78	84	3,494	91	1,038	8,482
For Petrochemical Feedstock Use	374	0	374	0	209	0	48	257	17	1,000	-6	13	0	1,024	-7	123	1,771
For Other Uses	967	10	977	39	1,488	260	464	2,251	204	1,286	831	65	84	2,470	98	915	6,711
Ethane	19	0	19	0	25	0	0	25	0	151	6	0	0	157	0	12	213
For Petrochemical Feedstock Use	0	0	0	0	0	0	0	0	0	151	6	0	0	157	0	0	157
For Other Uses	19	0	19	0	25	0	0	25	0	0	0	0	0	0	0	12	56
Propane	1,138	10	1,148	39	1,642	277	578	2,536	202	2,034	1,034	54	45	3,369	170	913	8,136
For Petrochemical Feedstock Use	310	0	310	0	208	0	48	256	0	726	16	0	0	742	0	118	1,426
For Other Uses	828	10	838	39	1,434	277	530	2,280	202	1,308	1,018	54	45	2,627	170	795	6,710
Butane	184	0	184	0	25	-17	-66	-58	-11	55	-106	23	3	-36	-63	116	143
For Petrochemical Feedstock Use	64	0	64	0	0	0	-66	-58	-11	123	-28	13	0	108	0	5	177
For Other Uses	120	0	120	0	25	-17	-66	-58	-11	-68	-78	10	3	-144	-63	111	-34
Butane-Propane Mixtures	0	0	0	0	4	0	0	4	13	46	-109	1	36	-13	-9	-3	-21
For Petrochemical Feedstock Use	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
For Other Uses	0	0	0	0	4	0	0	4	13	46	-109	1	36	-13	-9	-3	-21
Isobutane for Petro. Feed. Use	0	0	0	0	1	0	0	1	17	0	0	0	0	17	-7	0	11
Finished Motor Gasoline	18,516	797	19,313	1,078	35,938	4,303	14,197	55,516	7,896	39,545	26,361	1,790	1,050	76,642	6,606	28,462	186,539
Finished Leaded Motor Gasoline	7,182	405	7,587	553	15,886	2,363	8,353	27,155	3,901	15,307	11,287	937	617	32,049	4,181	12,057	83,029
Finished Unleaded Motor Gasoline	11,334	392	11,726	525	20,052	1,940	5,844	28,361	3,995	24,238	15,074	853	433	44,593	2,425	16,405	103,510
Finished Aviation Gasoline	17	0	17	0	86	0	15	101	5	161	164	0	0	330	18	176	642
Naphtha-Type Jet Fuel	521	33	554	43	430	108	291	872	716	1,355	478	136	346	3,031	421	1,250	6,128
Kerosene-Type Jet Fuel	766	0	766	108	3,264	177	616	4,165	736	5,129	6,660	9	44	12,578	581	6,950	25,040
Kerosene	297	56	353	0	668	106	137	911	88	941	1,550	5	48	2,632	74	170	4,140
Distillate Fuel Oil	8,117	485	8,602	277	10,541	1,731	5,253	17,802	2,827	17,292	9,346	1,440	745	31,650	3,142	10,528	71,724
Residual Fuel Oil	4,244	170	4,414	104	2,547	191	378	3,220	1,004	7,008	3,581	406	78	12,077	313	8,966	28,990
Naphtha < 400 Deg. For Petro. Feed. Use	318	0	318	0	73	0	102	175	219	2,021	501	0	0	2,741	0	38	3,272
Other Oils > 400 Deg. For Petro. Feed. Use	12	0	12	0	295	0	165	392	18	3,035	3,458	52	0	6,563	0	447	7,318
Special Naphthas	4	21	25	0	227	0	326	740	142	601	39	145	0	927	2	31	1,377
Lubricants	311	305	616	0	414	0	25	61	8	1,524	602	317	0	2,452	33	383	4,224
Wax	17	54	71	0	36	0	25	61	8	96	56	50	0	210	5	52	399
Petroleum Coke	1,136	14	1,150	27	2,120	303	777	3,227	293	2,659	1,512	134	9	4,607	319	3,337	12,640
Marketable	336	0	336	0	1,210	188	510	1,908	54	1,222	903	108	0	2,287	170	2,560	7,261
Catalyst	800	14	814	27	910	115	267	1,319	239	1,437	609	26	9	2,320	149	777	5,379
Asphalt and Road Oil	555	43	598	74	1,051	675	431	2,231	351	331	840	657	73	2,252	438	846	6,365
Still Gas	1,543	112	1,655	67	2,321	267	885	3,540	418	4,153	1,899	188	48	6,706	497	3,545	15,943
For Petrochemical Feedstock Use	28	0	28	0	1	0	0	1	5	411	28	0	0	444	22	123	618
For Other Uses	1,515	112	1,627	67	2,320	267	885	3,539	413	3,742	1,871	188	48	6,262	475	3,422	15,325
Miscellaneous Products	404	14	418	2	84	27	61	174	31	688	566	35	0	1,320	26	163	2,101
Fuel Use	16	2	18	0	0	0	19	19	0	10	248	0	0	258	22	23	340
Non-Fuel Use	388	12	400	2	84	27	42	155	31	678	318	35	0	1,062	4	140	1,761
Total Production	38,119	2,114	40,233	1,819	61,792	8,148	24,172	95,931	14,982	88,825	58,438	5,442	2,525	170,212	12,566	66,382	385,324
Processing Gain(-) or Loss(+)¹	-2,360	42	-2,318	-67	-2,833	-416	-693	-4,009	43	-2,632	-1,796	-64	-14	-4,463	-181	-3,820	-14,791

¹ Represents the arithmetic difference between input and output.

Notes: See Explanatory Notes on negative production.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 15. Percent Refinery Yield of Petroleum Products by PAD District,¹ January 1983

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States			
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico		Total	Rocky Mt.	Dist. V Coast
Finished Motor Gasoline ²	50.5	37.3	49.7	57.4	57.6	53.5	58.4	57.4	48.6	42.3	42.3	29.3	37.9	42.4	51.8	44.5	47.5
Finished Aviation Gasoline ³ .....	.0	.0	.0	.0	.1	.0	-3.2	-7	.2	.2	.3	.0	.0	.3	.2	.3	.0
Liquefied Refinery Gases	3.9	.5	3.7	2.5	3.1	3.5	2.5	3.0	1.6	2.8	1.6	1.5	3.6	2.3	.8	1.7	2.4
Naphtha-Type Jet Fuel	1.5	1.5	1.5	2.7	.8	1.5	1.4	1.0	5.1	1.7	.9	2.7	14.7	2.0	3.5	2.0	1.8
Kerosene-Type Jet Fuel	2.2	.0	2.1	6.8	6.0	2.4	3.0	5.0	5.3	6.3	12.7	.2	1.9	8.1	4.8	11.3	7.2
Kerosene .....	.9	2.6	1.0	0	1.2	1.4	.7	1.1	.6	1.2	3.0	.1	2.0	1.7	.6	.3	1.2
Distillate Fuel Oil	23.3	22.4	23.3	17.5	19.4	23.5	25.4	21.2	20.3	21.4	17.8	28.4	31.7	20.4	26.2	17.1	20.5
Residual Fuel Oil	12.2	7.8	11.9	6.6	4.7	2.6	1.8	3.8	7.2	8.7	6.8	8.0	3.3	7.8	2.6	14.6	8.3
Naphtha < 400 Deg. F. Petro. Feed. Use .....	.9	0	.9	0	.1	0	.5	.2	1.6	2.5	1.0	.0	0	1.8	0	.1	.9
Other Oils > 400 Deg. F. Petro. Feed. Use .....	.0	0	.0	0	.5	0	.0	.4	.1	.1	3.7	6.6	1.0	0	4.2	0	.7
Special Naphthas .....	.0	1.0	.1	0	.4	0	.8	.5	1.0	.7	.1	2.9	0	.6	.0	.1	.4
Lubricants .....	.9	14.1	1.7	0	.8	0	1.6	.9	.1	1.9	1.1	6.2	0	1.6	.3	.6	1.2
Wax .....	.0	2.5	.2	0	.1	0	.1	.1	.1	.1	.1	1.0	0	.1	.0	.1	.1
Petroleum Coke	3.3	.6	3.1	1.7	3.9	4.1	3.8	3.8	2.1	3.3	2.9	2.6	.4	3.0	2.7	5.4	3.6
Asphalt and Road Oil	1.6	2.0	1.6	4.7	1.9	9.1	2.1	2.7	2.5	.4	1.6	13.0	3.1	1.5	3.7	1.4	1.8
Sill Gas	4.4	5.2	4.5	4.2	4.3	3.6	4.3	4.2	3.0	5.1	3.6	3.7	2.0	4.3	4.1	5.8	4.6
Miscellaneous Products	1.2	.6	1.1	.1	.2	.4	.3	.2	.2	.8	1.1	.7	0	.9	.2	.3	.6
Processing Gain(-) or Loss(+) ⁴	-6.8	1.9	-6.3	-4.2	-5.2	-5.6	-3.3	-4.8	.3	-3.3	-3.4	-1.3	-6	-2.9	-1.5	-6.2	-4.2

¹ Based on crude oil input and net reruns of unfinished oils.² Based on total finished motor gasoline output plus net output of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and alcohol.³ Based on finished aviation gasoline output plus net output of aviation gasoline blending components.⁴ Represents the difference between input and production.

(S) Less than 0.05 percent.

Note: Total may not equal sum of components due to independent rounding.

See Explanatory Notes on negative production.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 16. Imports of Crude Oil and Petroleum Products by PAD District, January 1983
(Thousands of Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) ^{1 2}	26,237	13,363	44,407	1,507	5,564	91,080
Natural Gas Liquids	414	5,052	839	712	899	7,916
Natural Gasoline and Isopentane	0	0	0	0	235	235
Plant Condensate	0	159	0	90	0	249
Liquefied Petroleum Gases	414	4,892	839	623	664	7,432
Ethane	0	2,109	0	0	0	2,109
Propane	118	1,527	0	351	88	2,085
Butane	296	1,256	0	271	576	2,399
Butane-Propane Mixtures	0	0	839	0	0	839
Ethane-Propane Mixtures	0	0	0	0	0	0
Other Liquids ¹	2,715	588	2,717	0	279	6,299
Unfinished Oils ¹	2,662	282	2,717	0	258	5,919
Motor Gasoline Blending Components	54	306	0	0	20	380
Aviation Gasoline Blending Components	0	0	0	0	0	0
Finished Petroleum Products	25,653	496	2,755	10	1,320	30,234
Finished Motor Gasoline	3,761	138	(S)	0	693	4,593
Finished Leaded Motor Gasoline	1,895	136	(S)	0	468	2,499
Finished Unleaded Motor Gasoline	1,866	2	0	0	225	2,094
Finished Aviation Gasoline	(S)	0	0	0	0	(S)
Naphtha-Type Jet Fuel	0	0	0	0	0	0
Kerosene-Type Jet Fuel	830	0	0	0	0	830
Bonded Aircraft Fuel	0	0	0	0	0	0
Other	33	0	0	0	1	33
Kerosene	1,517	11	30	0	248	1,806
Distillate Fuel Oil	0	0	0	0	0	0
Bonded Ships Bunkers	1,517	11	30	0	248	1,806
Other	19,094	255	1,746	9	305	21,410
Residual Fuel Oil	0	0	0	0	0	0
Bonded Ships Bunkers	19,094	255	1,746	9	305	21,410
Other	8	5	222	0	29	264
Naphtha < 400 Deg. for Petro. Feed. Use	0	0	0	0	0	0
Other Oils > 400 Deg. for Petro. Feed. Use	124	74	355	(S)	16	570
Special Naphthas	231	4	53	(S)	(S)	288
Lubricants	50	3	0	0	6	59
Wax	2	3	0	0	11	16
Asphalt and Road Oil	2	3	0	0	10	364
Miscellaneous Products	2	3	349	(S)	10	364
Total Imports	55,020	19,499	50,718	2,230	8,062	135,528

¹ Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

(S) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, January 1983
(Thousands of Barrels)

Source	Crude Oil 1	LPG	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
All PAD Districts														
Arab OPEC														
Algeria	3,512	0	0	0	0	0	0	0	2,808	0	0	2,808	6,320	204
Iraq	1	0	0	0	0	0	0	0	0	0	(s)	(s)	1	(s)
Saudi Arabia	8,550	0	198	0	0	0	0	0	0	0	(s)	198	8,748	282
United Arab Emirates	1,234	0	0	0	0	0	0	0	0	0	235	235	1,469	47
Subtotal Arab OPEC	13,297	0	198	0	0	0	0	0	2,808	0	235	3,241	16,538	533
Other OPEC														
Ecuador	0	0	0	0	0	0	0	0	299	0	0	299	299	10
Gabon	1,028	0	0	0	0	0	0	0	0	0	0	0	1,028	33
Indonesia	7,749	0	0	0	101	0	0	(s)	39	0	0	141	7,890	255
Iran	1,345	0	0	0	0	0	0	0	0	0	0	0	1,345	43
Nigeria	5,765	0	0	0	0	0	0	0	0	0	(s)	(s)	5,765	186
Venezuela	4,668	0	822	0	252	223	0	0	3,600	246	237	5,380	10,048	324
Subtotal Other OPEC	20,556	0	822	0	353	223	0	(s)	3,938	246	237	5,819	26,375	851
Other														
Angola	1,676	0	0	0	0	0	0	0	0	0	0	0	1,676	54
Australia	0	96	0	0	0	0	0	0	0	0	(s)	96	96	3
Bahamas	0	0	1,354	0	0	0	0	0	519	0	222	2,095	2,095	68
Bolivia	538	0	0	0	0	0	0	0	0	0	0	0	538	17
Brazil	57	0	0	0	0	0	0	0	700	0	0	700	756	24
Canada	8,348	6,398	289	326	207	0	8	190	404	105	342	8,269	16,617	536
Congo	1	0	0	0	0	0	0	0	190	0	0	190	190	6
Egypt	1,306	(s)	42	0	0	0	0	(s)	0	0	0	42	1,348	43
France	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Malaysia	468	0	0	0	0	0	0	0	170	0	0	170	637	21
Mexico	24,233	839	0	0	(s)	0	0	13	1,199	2	19	2,071	26,304	849
Netherlands	1,038	98	0	0	933	0	0	0	0	0	(s)	1,032	2,069	67
Netherlands Antilles	0	0	1,599	0	0	220	0	150	4,795	0	(s)	6,765	6,765	218
Norway	1,807	0	0	0	0	0	0	0	0	0	0	0	1,807	58
Oman	593	0	0	0	0	0	0	0	0	0	0	0	593	19
People's Republic of China	0	0	0	0	516	0	0	0	76	0	0	592	592	19
Peru	761	0	0	0	0	0	0	0	846	0	0	846	1,607	52
Puerto Rico	0	0	231	54	284	0	26	199	0	213	226	1,232	1,232	40
Romania	0	0	0	0	231	0	0	0	0	0	0	231	231	7
Trinidad and Tobago	2,273	0	0	0	0	0	0	0	0	0	0	0	2,273	73
Tunisia	496	0	0	0	0	0	0	0	0	0	0	0	496	16
United Kingdom	9,531	0	0	0	234	0	0	0	0	0	(s)	234	9,765	315
Virgin Islands	0	0	1,090	0	1,546	387	0	1,139	4,995	0	113	9,270	9,270	299
Zaire	260	0	0	0	0	0	0	0	0	0	0	0	260	8
Other Western Hemisphere	140	0	0	0	0	0	0	0	397	4	0	426	565	18
Other Eastern Hemisphere	3,701	(s)	295	0	289	0	0	25	397	(s)	82	1,129	4,830	156
Subtotal Other	57,227	7,432	4,899	380	4,240	607	33	1,805	14,664	324	1,004	35,388	92,616	2,988
Total imports	91,080	7,432	5,919	380	4,593	830	33	1,806	21,410	570	1,476	44,449	135,528	4,372

See footnotes at end of table.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, January 1983
(Thousands of Barrels)
(continued)

Source	Crude Oil 1	LPG	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
PAD District I														
Arab OPEC														
Algeria	1,453	0	0	0	0	0	0	0	2,481	0	0	2,481	3,934	127
Iraq	1	0	0	0	0	0	0	0	0	0	0	0	1	(s)
Saudi Arabia	3,231	0	198	0	0	0	0	0	0	0	(s)	198	3,428	111
United Arab Emirates	831	0	0	0	0	0	0	0	0	0	0	0	831	27
Subtotal Arab OPEC	5,514	0	198	0	0	0	0	0	2,481	0	(s)	2,679	8,194	264
Other OPEC														
Ecuador	0	0	0	0	0	0	0	0	299	0	0	299	299	10
Gabon	1,028	0	0	0	0	0	0	0	0	0	0	0	1,028	33
Indonesia	2,381	0	0	0	0	0	0	0	0	0	0	0	2,381	77
Nigeria	3,054	0	0	0	0	0	0	0	0	0	0	0	3,054	99
Venezuela	2,027	0	547	0	252	223	0	0	3,119	0	0	4,141	6,168	199
Subtotal Other OPEC	8,490	0	547	0	252	223	0	0	3,418	0	0	4,440	12,930	417
Other														
Angola	1,676	0	0	0	0	0	0	0	0	0	0	0	1,676	54
Australia	0	96	0	0	0	0	0	0	0	0	(s)	96	96	3
Bahamas	0	0	0	0	0	0	0	0	519	0	0	519	519	17
Brazil	57	0	0	0	0	0	0	0	700	0	0	700	756	24
Canada	0	220	0	0	51	0	7	178	140	13	65	675	675	22
Congo	0	0	0	0	0	0	0	0	190	0	0	190	190	6
Egypt	0	0	42	0	0	0	0	(s)	0	0	(s)	42	42	1
France	0	(s)	0	0	0	0	0	0	615	0	1	616	3,320	107
Mexico	2,704	0	0	0	0	0	0	0	0	0	0	1,031	2,069	67
Netherlands	1,038	98	0	0	933	0	0	0	4,795	0	(s)	6,363	6,363	205
Netherlands Antilles	0	0	1,347	0	0	220	0	0	0	0	0	0	593	19
Oman	593	0	0	0	0	0	0	0	846	0	0	846	1,607	52
Peru	761	0	0	0	284	0	0	199	0	111	226	1,130	1,130	36
Puerto Rico	0	0	231	54	231	0	26	0	0	0	0	231	231	7
Romania	0	0	0	0	0	0	0	0	0	0	0	0	496	16
Tunisia	496	0	0	0	0	0	0	0	0	0	0	0	3,835	124
United Kingdom	3,602	0	0	0	234	0	0	0	0	0	(s)	234	8,364	270
Virgin Islands	0	0	297	0	1,546	387	0	1,139	4,995	0	0	8,364	8,364	8
Zaire	260	0	0	0	0	0	0	0	0	0	0	0	260	8
Other Western Hemisphere														
Hemisphere	0	0	0	0	0	0	0	0	395	0	0	395	395	13
Other Eastern Hemisphere	1,046	(s)	0	0	230	0	0	0	0	(s)	(s)	231	1,277	41
Subtotal Other	12,233	414	1,917	54	3,510	607	33	1,517	13,195	124	293	21,663	33,896	1,093
Total Imports	26,237	414	2,662	54	3,761	830	33	1,517	19,094	124	294	28,783	55,020	1,775
PAD District II														
Arab OPEC														
Algeria	501	0	0	0	0	0	0	0	0	0	0	0	501	16
Iraq	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Subtotal Arab OPEC	501	0	0	0	0	0	0	0	0	0	(s)	(s)	501	16

See footnotes at end of table.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, January 1983
(Thousands of Barrels)
(continued)

Source	Crude Oil 1	LPG	Unfin- ished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Kero- sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod- ucts 2	Total Prod- ucts	Total Petro- leum	Total (Daily Average)
PAD District II														
Other OPEC														
Iran	542	0	0	0	0	0	0	0	0	0	0	0	542	17
Nigeria	432	0	0	0	0	0	0	0	0	0	0	0	432	14
Venezuela	855	0	0	0	0	0	0	0	0	0	0	0	855	28
Subtotal Other OPEC	1,828	0	0	0	0	0	0	0	0	0	0	0	1,828	59
Other														
Canada	6,537	4,892	282	306	138	0	0	11	255	74	177	6,135	12,672	409
Egypt	467	0	0	0	0	0	0	0	0	0	0	0	467	15
France	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Mexico	2,437	0	0	0	0	0	0	0	0	0	0	0	2,437	79
United Kingdom	941	0	0	0	0	0	0	0	0	0	0	0	941	30
Other Western														
Hemisphere	140	0	0	0	0	0	0	0	0	0	0	0	140	5
Other Eastern Hemisphere	511	0	0	0	0	0	0	0	0	0	0	0	511	16
Subtotal Other	11,033	4,892	282	306	138	0	0	11	255	74	177	6,135	17,169	554
Total Imports	13,363	4,892	282	306	138	0	0	11	255	74	177	6,135	19,499	629
PAD District III														
Arab OPEC														
Algeria	1,558	0	0	0	0	0	0	0	327	0	0	327	1,885	61
Saudi Arabia	5,319	0	0	0	0	0	0	0	0	0	0	0	5,319	172
United Arab Emirates	403	0	0	0	0	0	0	0	0	0	0	0	403	13
Subtotal Arab OPEC	7,281	0	0	0	0	0	0	0	327	0	0	327	7,607	245
Other OPEC														
Indonesia	867	0	0	0	0	0	0	0	0	0	0	0	867	28
Iran	804	0	0	0	0	0	0	0	0	0	0	0	804	26
Nigeria	2,278	0	0	0	0	0	0	0	0	0	(s)	(s)	2,278	73
Venezuela	1,495	0	275	0	0	0	0	0	480	246	237	1,238	2,733	88
Subtotal Other OPEC	5,444	0	275	0	0	0	0	0	480	246	237	1,238	6,683	216
Other														
Bahamas	0	0	1,354	0	0	0	0	0	0	0	222	1,575	1,575	51
Bolivia	538	0	0	0	0	0	0	0	0	0	0	0	538	17
Canada	0	0	(s)	0	0	0	0	0	0	0	0	(s)	(s)	(s)
Congo	1	0	0	0	0	0	0	0	0	0	0	0	1	1
Egypt	839	0	0	0	0	0	0	0	0	0	0	0	839	27
Malaysia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mexico	19,092	839	0	0	(s)	0	0	5	582	2	(s)	1,428	20,520	662
Netherlands	0	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)
Norway	1,807	0	0	0	0	0	0	0	0	0	0	0	1,807	58
Puerto Rico	0	0	0	0	0	0	0	0	0	102	0	102	102	3
Trinidad and Tobago	2,273	0	0	0	0	0	0	0	0	0	0	0	2,273	73
United Kingdom	4,988	0	0	0	0	0	0	0	0	0	(s)	(s)	4,988	161
Virgin Islands	0	0	793	0	0	0	0	0	0	0	113	906	906	29

See footnotes at end of table.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, January 1983
(Thousands of Barrels)
(continued)

Source	Crude Oil 1	LPG	Unfin- ished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Kero- sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod- ucts 2	Total Prod- ucts	Total Petro- leum	Total (Daily Average)
PAD District III														
Other														
Other Western Hemisphere	0	0	0	0	0	0	0	25	2	4	0	31	31	1
Other Eastern Hemisphere	2,143	0	295	0	0	0	0	0	186	0	53	533	2,677	86
Subtotal Other	31,682	839	2,442	0	(s)	0	0	30	939	108	387	4,746	36,428	1,175
Total Imports	44,407	839	2,717	0	(s)	0	0	30	1,746	355	624	6,311	50,718	1,636
PAD District IV														
Other														
Canada	1,507	623	0	0	0	0	0	0	9	(s)	90	722	2,230	72
Subtotal Other	1,507	623	0	0	0	0	0	0	9	(s)	90	722	2,230	72
Total Imports	1,507	623	0	0	0	0	0	0	9	(s)	90	722	2,230	72
PAD District V														
Arab OPEC														
United Arab Emirates	0	0	0	0	0	0	0	0	0	0	235	235	235	8
Subtotal Arab OPEC	0	0	0	0	0	0	0	0	0	0	235	235	235	8
Other OPEC														
Indonesia	4,501	0	0	0	101	0	0	(s)	39	0	0	141	4,642	150
Venezuela	292	0	0	0	0	0	0	0	0	0	0	0	292	9
Subtotal Other OPEC	4,793	0	0	0	101	0	0	(s)	39	0	0	141	4,933	159
Other														
Canada	304	664	7	20	17	0	0	1	0	16	10	736	1,040	34
Malaysia	468	0	0	0	0	0	0	0	0	0	0	0	468	15
Mexico	0	0	0	0	0	0	0	7	2	0	17	27	27	1
Netherlands Antilles	0	0	252	0	0	0	0	150	0	0	0	402	402	13
People's Republic of China	0	0	0	0	516	0	0	0	76	0	0	592	592	19
Other Eastern Hemisphere	0	0	0	0	59	0	0	90	187	0	29	365	365	12
Subtotal Other	771	664	258	20	592	0	1	248	266	16	56	2,122	2,894	93
Total Imports	5,564	664	258	20	693	0	1	248	305	16	292	2,498	8,062	260

1 Includes crude oil imported for storage in the Strategic Petroleum Reserve.

2 Includes aviation gasoline, waxes, asphalt, lubricants, natural gasoline, isopentane, plant condensate, naphthas less than 400 degrees F, other oils greater than 400 degrees F and miscellaneous products.

(s) Less than 500 barrels or less than 500 barrels per day.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 18. Exports of Crude Oil and Petroleum Products by PAD District, January 1983
(Thousands of Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) ¹	0	1,667	0	0	1,958	3,625
Liquefied Petroleum Gases	32	1,696	1,732	(s)	202	3,663
Ethane	(s)	0	0	0	0	(s)
Propane	14	677	1,306	(s)	81	2,078
Butane	18	1,019	427	(s)	121	1,585
Butane-Propane Mixtures	0	0	0	0	0	0
Finished Motor Gasoline	1	(s)	(s)	0	12	14
Naphtha-Type Jet Fuel	(s)	(s)	0	0	0	(s)
Kerosene-Type Jet Fuel	0	0	235	0	37	272
Kerosene	(s)	0	0	0	(s)	(s)
Distillate Fuel Oil	528	1	3,762	0	1,071	5,361
Residual Fuel Oil	671	0	4,632	0	3,822	9,125
Naphtha < 400 Deg. for Petrochem. Feedstock	44	5	7	2	7	65
Other Oils > 400 Deg. for Petrochem. Feedstock	1	56	68	0	112	237
Special Naphthas	3	1	35	0	3	42
Lubricants	215	9	149	1	44	419
Wax	6	1	11	0	4	21
Petroleum Coke	610	37	3,328	0	3,256	7,231
Asphalt	57	1	(s)	(s)	1	60
Miscellaneous Products	12	1	24	(s)	2	39
Total Product Exports	2,180	1,808	13,985	3	8,573	26,549
Total Exports	2,180	3,475	13,985	3	10,531	30,174

¹ Exports of crude oil are prohibited under normal circumstances. Some crude oil is shipped to Canada in exchange on a barrel-for-barrel basis. Shipments of crude oil to Puerto Rico and the Virgin Islands are not prohibited because these territories are U.S. possessions.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 19. Exports of Crude Oil and Petroleum Products by Destination, January 1983
(Thousands of Barrels)

Destination	Crude Oil 1	LPG	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubricants	Wax	Petroleum Coke	Asphalt	Other	Total	Total (Daily Average)
Argentina	0	(s)	0	0	0	0	1	8	1	50	(s)	(s)	60	2
Australia	0	(s)	(s)	0	0	0	2	16	0	168	(s)	2	189	6
Bahamas	0	7	1	0	0	0	0	2	0	0	0	(s)	11	(s)
Bahrain	0	0	0	0	0	0	(s)	(s)	0	61	0	(s)	61	2
Belgium & Luxembourg	0	(s)	0	0	72	0	0	61	(s)	429	(s)	3	565	18
Brazil	0	208	0	0	0	0	8	1	(s)	0	0	0	217	7
Cameroon	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Canada	1,667	1,700	(s)	0	1	250	3	45	3	206	2	80	3,956	128
Chile	0	0	0	0	0	0	(s)	1	(s)	(s)	0	(s)	2	(s)
China (Taiwan)	0	0	0	0	0	0	0	9	(s)	(s)	0	(s)	10	(s)
Colombia	0	(s)	0	0	0	0	0	2	(s)	0	(s)	1	3	(s)
Costa Rica	0	0	0	0	0	25	(s)	3	0	17	0	1	45	1
Denmark	0	1	0	0	240	0	0	1	(s)	0	0	(s)	242	8
Dominican Republic	0	(s)	0	0	0	(s)	0	1	(s)	15	0	(s)	17	1
Ecuador	0	25	0	0	0	0	(s)	(s)	0	0	0	(s)	26	1
Egypt	0	0	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
El Salvador	0	0	0	0	0	0	0	1	(s)	0	0	1	2	(s)
Finland	0	198	0	0	770	0	0	(s)	0	927	0	5	1,903	61
France	0	0	0	0	27	21	0	(s)	2	0	0	0	48	2
French Pacific Isl	0	0	0	0	0	0	0	(s)	0	12	0	0	12	(s)
Ghana	0	0	0	0	0	0	0	(s)	0	0	0	(s)	1	(s)
Greece	0	1	0	0	150	0	0	3	0	0	0	0	193	6
Guatemala	0	40	0	0	0	0	0	0	0	0	0	0	0	0
Guinea	0	0	0	0	0	0	0	0	0	0	0	(s)	2	(s)
Honduras	0	1	0	0	0	0	0	1	(s)	0	0	(s)	103	3
India	0	2	0	0	99	0	(s)	1	(s)	0	0	(s)	2	(s)
Indonesia	0	0	0	0	0	0	0	15	0	0	(s)	0	15	(s)
Iran	0	(s)	0	0	(s)	0	0	(s)	0	0	0	0	(s)	(s)
Israel	0	0	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
Italy	0	289	0	0	538	602	0	(s)	(s)	677	(s)	1	2,108	68
Ivory Coast	0	0	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
Jamaica	0	(s)	0	0	0	187	(s)	(s)	0	0	0	3	190	6
Japan	0	0	0	0	297	1,022	11	(s)	4	1,900	0	5	3,245	105
Jordan	0	1	0	0	0	0	0	0	0	173	56	1	1,250	40
Korea, Republic of	0	0	(s)	0	132	886	0	(s)	0	0	0	(s)	1	(s)
Kuwait	0	0	0	0	0	0	0	(s)	2	0	0	(s)	2	(s)
Lebanon	0	0	0	0	0	0	(s)	0	0	0	0	1	119	4
Liberia	0	0	0	0	0	118	0	(s)	0	0	0	(s)	1	(s)
Malaysia	0	(s)	0	0	0	0	0	(s)	0	0	0	0	1	(s)
Mexico	0	943	12	37	(s)	0	3	46	(s)	3	0	2	1,046	34
Netherlands	0	82	0	235	1,780	1,610	3	2	(s)	903	0	14	4,629	149
Netherlands Antilles	0	0	0	0	0	554	0	0	(s)	0	0	(s)	555	18
New Zealand	0	0	0	0	84	94	3	3	(s)	95	(s)	5	285	9
Nicaragua	0	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)
Nigeria	0	0	0	0	0	0	0	1	(s)	0	0	(s)	1	(s)
Norway	0	0	0	0	0	0	0	(s)	0	158	0	0	158	5
Pacific Trust Terr.	0	0	0	0	0	0	0	(s)	0	1	1	0	1	(s)
Panama	0	0	0	0	114	15	0	2	(s)	0	0	(s)	131	4
Peru	0	1	0	0	0	0	0	2	(s)	0	0	0	3	(s)
Philippines	0	0	0	0	0	0	2	5	(s)	(s)	0	69	76	2
Puerto Rico	1,488	7	0	0	(s)	172	1	9	(s)	0	(s)	9	1,686	54
Rep. of South Africa	0	(s)	0	0	0	0	0	1	5	0	(s)	1	8	(s)

See footnotes at end of table.

Table 19. Exports of Crude Oil and Petroleum Products by Destination, January 1983
(Thousands of Barrels)
(continued)

Destination	Crude Oil ¹	LPG	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubricants	Wax	Petroleum Coke	Asphalt	Other	Total	Total (Daily Average)
Saudi Arabia	0	(s)	0	0	0	0	0	19	0	0	0	1	21	1
Singapore	0	(s)	0	0	278	1,929	2	2	(s)	0	0	5	2,216	71
Spain	0	39	0	0	349	223	0	(s)	(s)	918	0	70	1,600	52
Surinam	0	(s)	0	0	0	0	0	(s)	0	13	0	(s)	14	(s)
Sweden	0	(s)	0	0	215	215	0	1	(s)	0	(s)	2	433	14
Switzerland	0	(s)	0	0	0	326	(s)	1	(s)	0	0	(s)	327	11
Thailand	0	0	0	0	0	0	1	5	(s)	0	0	44	51	2
Trinidad and Tobago	0	0	0	0	0	0	0	(s)	0	0	0	(s)	(s)	(s)
Turkey	0	0	0	0	0	0	0	14	0	0	0	1	15	(s)
United Arab Emirates	0	0	0	(s)	0	0	0	1	0	58	0	(s)	59	2
United Kingdom	0	(s)	0	0	215	493	(s)	77	(s)	(s)	(s)	1	788	25
U.S.S.R.	0	0	0	0	0	0	0	33	0	67	0	(s)	101	3
Uruguay	0	0	0	0	0	0	(s)	1	0	0	0	(s)	1	(s)
Venezuela	0	(s)	0	0	0	0	0	(s)	(s)	61	0	1	63	2
Virgin Islands	0	1	0	0	0	307	0	(s)	0	0	0	(s)	308	10
West Germany	0	4	0	(s)	0	0	0	2	(s)	234	0	3	244	8
Yugoslavia	0	0	0	0	0	76	0	(s)	0	0	0	0	(s)	(s)
Other	470	108	0	0	0	0	0	8	(s)	86	(s)	1	750	24
Total	3,625	3,663	14	272	5,361	9,125	42	419	21	7,231	60	340	30,174	973

¹ Exports of crude oil are prohibited under normal circumstances. Some crude oil is shipped to Canada in exchange on a barrel-for-barrel basis. Shipments of crude oil to Puerto Rico and the Virgin Islands are not prohibited because these territories are U.S. possessions.

(s) Less than 500 barrels or less than 500 barrels per day.

Note: Total may not equal sum of components due to independent rounding.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, January 1983
(Thousands of Barrels)

Commodity	PAD District I		PAD District II		PAD District III				Total	PAD District III				Total	PAD District IV		United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okl., Kans., Mo.	Texas Inland		Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico		Rocky Mt.	Dist. V	
Crude Oil (incl. lease condensate)																	
Refinery	--	--	15,566	--	--	--	--	15,308	--	--	--	--	--	45,383	2,416	24,230	102,903
Tank Farms and Pipelines	--	--	1,907	--	--	--	--	61,190	--	--	--	--	--	101,264	11,230	33,361	208,952
Leases	--	--	61	--	--	--	--	1,684	--	--	--	--	--	17,553	1,438	1,556	22,292
Strategic Petroleum Reserve	--	--	0	--	--	--	--	0	--	--	--	--	--	300,613	0	0	300,613
Alaskan In-Transit	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	26,703	26,703
Total	--	--	17,534	--	--	--	--	78,182	--	--	--	--	--	464,813	15,084	85,850	661,463
Total Stocks, All Oils (excl. Crude Oil)																	
Refinery	39,812	3,393	43,205	788	45,748	6,850	19,983	73,369	10,631	72,289	48,513	4,807	1,502	137,742	15,198	68,160	337,674
Bulk Terminal	--	--	143,097	--	--	--	--	92,243	--	--	--	--	--	71,346	3,245	26,283	336,214
Pipeline	--	--	28,575	--	--	--	--	35,450	--	--	--	--	--	39,666	3,077	4,307	111,075
Natural Gas Processing Plant	155	48	203	0	243	62	1,018	1,323	1,882	1,661	687	81	197	4,508	263	72	6,369
Total	--	--	215,080	--	--	--	--	202,385	--	--	--	--	--	253,262	21,783	98,822	791,332
Natural Gasoline and Isopentane																	
Refinery	3	0	3	0	26	61	96	183	81	81	127	0	12	301	13	210	710
Bulk Terminal	--	--	30	--	--	--	--	1,027	--	--	--	--	--	1,191	0	0	2,248
Pipeline	--	--	0	--	--	--	--	412	--	--	--	--	--	754	130	5	1,301
Natural Gas Processing Plant	4	4	8	0	24	17	105	146	338	164	137	27	38	704	49	20	927
Total	--	--	41	--	--	--	--	1,768	--	--	--	--	--	2,950	192	235	5,186
Unfractionated Stream																	
Refinery	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1
Bulk Terminal	--	--	0	--	--	--	--	331	--	--	--	--	--	848	0	0	1,179
Pipeline	--	--	0	--	--	--	--	242	--	--	--	--	--	1,292	355	0	1,889
Natural Gas Processing Plant	0	0	0	0	96	1	498	595	112	1,306	67	2	14	1,501	31	0	2,127
Total	--	--	0	--	--	--	--	1,168	--	--	--	--	--	3,642	386	0	5,196
Plant Condensate																	
Refinery	0	0	0	0	5	0	0	5	15	89	0	77	0	181	0	0	186
Bulk Terminal	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	0	0
Pipeline	--	--	0	--	--	--	--	0	--	--	--	--	--	1,201	0	0	1,201
Natural Gas Processing Plant	0	0	0	0	3	4	6	13	34	23	7	11	0	75	5	0	93
Total	--	--	0	--	--	--	--	18	--	--	--	--	--	1,457	5	0	1,480
Liquefied Petroleum Gases																	
Refinery	668	18	686	144	1,473	143	570	2,330	222	1,583	2,045	24	25	3,899	317	959	8,191
Bulk Terminal	--	--	2,094	--	--	--	--	18,041	--	--	--	--	--	38,968	59	730	59,892
Pipeline	--	--	2,545	--	--	--	--	6,440	--	--	--	--	--	3,578	40	0	12,603
Natural Gas Processing Plant	139	44	183	0	117	40	409	566	1,120	166	476	40	144	1,946	140	52	2,887
Total	--	--	5,508	--	--	--	--	27,377	--	--	--	--	--	48,391	556	1,741	83,573
Ethane																	
Refinery	0	0	0	0	7	0	0	7	0	335	0	0	0	335	0	0	342
Bulk Terminal	--	--	0	--	--	--	--	1,093	--	--	--	--	--	1,137	0	0	2,230
Pipeline	--	--	0	--	--	--	--	1,036	--	--	--	--	--	260	0	0	1,296

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, January 1983
(Thousands of Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		PAD District V	
	East Coast	Appalachian #1	Total	Appalachian #2	Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	Dist. V West	United States
Ethane																	
Natural Gas Processing Plant	0	0	0	0	25	0	19	44	0	1	0	1	0	2	7	0	53
Total	—	—	0	—	—	—	—	2,180	—	—	—	—	—	1,734	7	0	3,921
Propane for Petrochemical Feedstock Use																	
Refinery	52	0	52	0	127	0	1	128	0	4	316	0	0	320	0	0	500
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	52	—	—	—	—	128	—	—	—	—	—	320	0	0	500
Propane For Other Uses																	
Refinery	513	5	518	3	967	37	291	1,298	82	510	969	2	2	1,565	135	245	3,761
Bulk Terminal	—	—	1,847	—	—	—	—	10,744	—	—	—	—	—	20,667	59	228	33,545
Pipeline	—	—	2,459	—	—	—	—	3,501	—	—	—	—	—	1,235	5	0	7,200
Natural Gas Processing Plant	109	41	150	0	62	30	188	280	340	33	357	16	77	823	95	36	1,384
Total	—	—	4,974	—	—	—	—	15,823	—	—	—	—	—	24,290	294	509	45,890
Butane For Petro. Feed Use																	
Refinery	0	0	0	0	0	8	0	8	0	24	0	2	0	26	0	2	36
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	0	—	—	—	—	8	—	—	—	—	—	26	0	2	36
Butane For Other Uses																	
Refinery	103	0	103	85	237	65	134	521	47	279	405	7	2	740	155	534	2,053
Bulk Terminal	—	—	246	—	—	—	—	1,578	—	—	—	—	—	6,162	0	274	8,260
Pipeline	—	—	86	—	—	—	—	809	—	—	—	—	—	759	0	0	1,654
Natural Gas Processing Plant	29	1	30	0	21	8	164	193	320	64	71	12	50	517	36	12	788
Total	—	—	465	—	—	—	—	3,101	—	—	—	—	—	8,178	191	820	12,755
Butane-Propane Mixtures For Petro. Feed Use																	
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Butane-Propane Mixtures For Other Uses																	
Refinery	0	0	0	0	5	0	0	5	1	16	14	0	12	43	5	140	193
Bulk Terminal	—	—	0	—	—	—	—	338	—	—	—	—	—	38	0	132	508
Pipeline	—	—	0	—	—	—	—	18	—	—	—	—	—	661	0	0	679
Natural Gas Processing Plant	0	0	0	0	0	0	1	1	6	6	0	2	0	14	0	3	18
Total	—	—	0	—	—	—	—	362	—	—	—	—	—	756	5	275	1,398
Ethane-Propane Mixtures																	
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulk Terminal	—	—	0	—	—	—	—	2,971	—	—	—	—	—	7,578	0	0	10,549
Pipeline	—	—	0	—	—	—	—	498	—	—	—	—	—	531	35	0	1,064
Natural Gas Processing Plant	0	0	0	0	2	0	26	28	394	1	0	0	8	403	0	0	431
Total	—	—	0	—	—	—	—	3,497	—	—	—	—	—	8,512	35	0	12,044

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, January 1983
(Thousands of Barrels) (continued)

(Thousands of barrels) (continued)

Commodity	PAD District I		Total	PAD District II				Total	PAD District III				Total	PAD District IV		United States	
	East Coast	Appalachian #1		Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.		Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.		New Mexico	Rocky Mt.		Dist. V West Coast
Isobutane																	
Refinery	0	13	13	56	130	33	144	363	92	415	341	13	9	870	38	1,306	
Bulk Terminal	—	—	1	—	—	—	—	1,317	—	—	—	—	—	3,386	0	4,800	
Pipeline	—	—	0	—	—	—	—	578	—	—	—	—	—	132	0	710	
Natural Gas Processing Plant	1	2	3	0	7	2	11	20	60	61	48	9	9	187	2	213	
Total	—	—	17	—	—	—	—	2,278	—	—	—	—	—	4,575	24	7,029	
Other Hydrocarbons and Alcohol																	
Refinery	73	0	73	0	102	0	0	102	1	87	40	0	0	128	0	309	
Total	—	—	73	—	—	—	—	102	—	—	—	—	—	128	0	309	
Unfinished Oils																	
Refinery	2,635	205	2,840	39	2,558	114	1,004	3,715	964	8,256	5,352	163	101	14,836	488	5,118	26,997
Naphtha and Lighter	1,861	31	1,892	0	1,748	5	411	2,164	632	5,893	2,033	40	5	8,603	309	4,018	16,986
Kerosene and Lighter Gas Oils	5,985	340	6,325	61	4,618	295	1,689	6,663	954	11,065	7,935	389	151	20,494	951	12,706	47,139
Heavy Gas Oils	1,374	326	1,700	1	3,034	10	1,286	4,331	402	3,559	3,346	50	0	7,357	916	4,849	19,153
Residuum	11,855	902	12,757	101	11,958	424	4,390	16,873	2,952	28,773	18,666	642	257	51,290	2,664	26,691	110,275
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Motor Gasoline Blending Components																	
Refinery	4,536	131	4,667	32	5,945	514	2,041	8,532	1,622	8,208	5,814	165	208	16,017	2,949	8,450	40,615
Bulk Terminal	—	—	263	—	—	—	—	472	—	—	—	—	—	712	0	333	1,780
Pipeline	—	—	0	—	—	—	—	141	—	—	—	—	—	71	0	0	212
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	4,930	—	—	—	—	9,145	—	—	—	—	—	16,800	2,949	8,783	42,607
Aviation Gasoline Blending Components																	
Refinery	0	0	0	0	111	0	12	123	86	102	218	0	0	406	0	19	548
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	0	—	—	—	—	123	—	—	—	—	—	406	0	19	548
Total Finished Motor Gasoline																	
Refinery	6,291	284	6,575	107	8,181	1,708	4,334	14,330	2,161	8,491	5,563	676	186	17,077	2,792	8,114	48,888
Bulk Terminal	—	—	43,414	—	—	—	—	35,823	—	—	—	—	—	12,160	2,055	12,192	105,644
Pipeline	—	—	15,004	—	—	—	—	15,987	—	—	—	—	—	18,915	1,582	2,242	53,730
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total Finished Motor Gasoline																	
Natural Gas Processing Plant	12	0	12	0	0	0	0	0	0	0	0	0	0	0	37	0	49
Total	—	—	65,005	—	—	—	—	66,140	—	—	—	—	—	48,152	6,466	22,548	208,311
Finished Lead Motor Gasoline																	
Refinery	2,616	174	2,790	73	4,051	1,116	2,602	7,842	1,168	3,858	2,642	390	102	8,160	1,784	3,107	23,683
Bulk Terminal	—	—	21,348	—	—	—	—	19,078	—	—	—	—	—	5,990	1,337	5,925	53,678
Pipeline	—	—	8,692	—	—	—	—	8,132	—	—	—	—	—	9,788	1,062	1,134	28,808
Natural Gas Processing Plant	10	0	10	0	0	0	0	0	0	0	0	0	0	0	33	0	43
Total	—	—	32,840	—	—	—	—	35,052	—	—	—	—	—	23,938	4,216	10,166	106,212

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, January 1983
(Thousands of Barrels) (continued)

Commodity	PAD District I		Total	PAD District II				Total	PAD District III					Total	PAD District IV		United States
	East Coast	Appalachian #1		Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.		Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico		Rocky Mnt.	West Coast	
Finished Unleaded Motor Gasoline																	
Refinery	3,675	110	3,785	34	4,130	592	1,732	6,488	993	4,633	2,921	286	84	8,917	1,008	5,007	25,205
Bulk Terminal	—	—	22,066	—	—	—	—	16,745	—	—	—	—	—	6,170	718	6,267	51,966
Pipeline	—	—	6,312	—	—	—	—	7,855	—	—	—	—	—	9,127	520	1,108	24,922
Natural Gas Processing Plant	2	0	2	0	0	0	0	0	0	0	0	0	0	0	4	0	6
Total	—	—	32,165	—	—	—	—	31,088	—	—	—	—	—	24,214	2,250	12,382	102,099
Finished Aviation Gasoline																	
Refinery	24	0	24	0	114	0	22	136	31	297	182	0	0	510	46	241	957
Bulk Terminal	—	—	423	—	—	—	—	459	—	—	—	—	—	150	11	451	1,494
Pipeline	—	—	0	—	—	—	—	40	—	—	—	—	—	29	0	0	69
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	78	0	0	0	0	78	0	0	78
Total	—	—	447	—	—	—	—	635	—	—	—	—	—	767	57	692	2,598
Naphtha-Type Jet Fuel																	
Refinery	256	40	296	0	505	56	213	774	266	877	419	161	135	1,858	271	850	4,049
Bulk Terminal	—	—	28	—	—	—	—	617	—	—	—	—	—	237	9	574	1,465
Pipeline	—	—	713	—	—	—	—	330	—	—	—	—	—	575	101	381	2,100
Total	—	—	1,037	—	—	—	—	1,721	—	—	—	—	—	2,670	381	1,805	7,614
Kerosene-Type Jet Fuel																	
Refinery	1,069	0	1,069	35	1,279	94	233	1,641	306	2,258	2,023	16	19	4,622	380	3,839	11,551
Bulk Terminal	—	—	5,561	—	—	—	—	3,267	—	—	—	—	—	1,177	148	2,130	12,283
Pipeline	—	—	3,041	—	—	—	—	2,917	—	—	—	—	—	3,581	154	518	10,211
Total	—	—	9,671	—	—	—	—	7,825	—	—	—	—	—	9,380	682	6,487	34,045
Kerosene																	
Refinery	173	61	234	0	785	46	341	1,172	46	882	519	8	72	1,527	12	130	3,075
Bulk Terminal	—	—	3,363	—	—	—	—	1,414	—	—	—	—	—	324	26	75	5,202
Pipeline	—	—	360	—	—	—	—	180	—	—	—	—	—	536	0	0	1,076
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	1	0	0	0	1	2	0	0	2
Total	—	—	3,957	—	—	—	—	2,766	—	—	—	—	—	2,389	38	205	9,355
Distillate Fuel Oils																	
Refinery	7,088	398	7,486	52	8,026	1,881	4,510	14,469	1,233	7,599	4,433	932	340	14,537	2,504	6,081	45,077
Bulk Terminal	—	—	56,720	—	—	—	—	23,975	—	—	—	—	—	8,273	872	6,834	96,674
Pipeline	—	—	6,912	—	—	—	—	8,761	—	—	—	—	—	8,907	715	1,146	26,441
Distillate Fuel Oils																	
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	2
Total	—	—	71,118	—	—	—	—	47,205	—	—	—	—	—	31,719	4,091	14,061	168,194
Residual Fuel Oils																	
Refinery	3,724	126	3,850	56	2,256	359	165	2,836	366	4,744	4,351	217	44	9,722	542	6,778	23,728
Bulk Terminal	—	—	26,019	—	—	—	—	2,153	—	—	—	—	—	6,597	0	2,182	36,951
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	1	0	15	16
Total	—	—	23,869	—	—	—	—	4,989	—	—	—	—	—	16,320	542	8,975	60,695

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, January 1983
(Thousands of Barrels) (continued)

Commodity	PAD District I		PAD District II				PAD District III				Total		PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	Dist. V West Coast	United States
Naphtha < 400 Deg. Petro. Feedstock																
Refinery	137	0	137	0	79	0	99	93	942	460	9	0	1,504	0	210	2,029
Total	137	0	137	0	79	0	99	93	942	460	9	0	1,504	0	210	2,029
Other Oils > 400 Deg. Petro. Feedstock																
Refinery	6	0	6	0	130	0	1	352	953	220	37	0	1,562	0	388	2,087
Total	6	0	6	0	130	0	1	352	953	220	37	0	1,562	0	388	2,087
Special Naphthas																
Refinery	26	50	76	0	196	0	161	32	1,170	70	132	0	1,404	9	185	2,031
Bulk Terminal	--	--	807	--	--	--	--	--	--	--	--	--	24	0	31	1,116
Natural Gas Processing Plant	0	0	0	0	0	0	0	137	0	0	0	0	137	0	0	137
Total	--	--	883	--	--	--	--	611	--	--	--	--	1,565	9	216	3,284
Lubricants																
Refinery	1,092	1,107	2,199	0	819	0	724	42	3,981	1,417	582	0	6,022	90	755	10,609
Bulk Terminal	--	--	1,397	--	--	--	--	--	--	--	--	--	348	3	522	3,396
Total	--	--	3,596	--	--	--	--	--	--	--	--	--	6,370	93	1,277	14,005
Wax																
Refinery	24	160	184	0	33	0	54	87	26	210	168	52	0	456	8	788
Total	--	--	184	--	--	--	--	87	--	--	--	--	--	456	8	788
Petroleum Coke																
Refinery	854	0	854	0	905	191	984	0	135	344	270	0	749	813	2,540	7,036
Total	854	0	854	0	905	191	984	0	135	344	270	0	749	813	2,540	7,036
Asphalt and Road Oil																
Refinery	1,541	69	1,610	260	2,753	1,359	1,019	677	452	1,097	768	204	3,198	1,788	1,450	13,437
Bulk Terminal	--	--	2,801	--	--	--	--	--	--	--	--	--	278	62	148	6,470
Total	--	--	4,411	--	--	--	--	--	--	--	--	--	3,476	1,850	1,598	19,907
Miscellaneous Products																
Refinery	372	47	419	1	67	14	14	21	374	337	39	0	771	0	211	1,497
Bulk Terminal	--	--	177	--	--	--	--	--	--	--	--	--	59	0	81	420
Pipeline	--	--	0	--	--	--	--	--	--	--	--	--	226	0	0	226
Natural Gas Processing Plant	0	0	0	0	3	0	0	3	60	2	0	1	63	1	0	67
Total	--	--	596	--	--	--	--	202	--	--	--	--	1,119	1	292	2,210
Total Stocks, All Oils	--	--	232,614	--	--	--	--	280,567	--	--	--	--	718,075	36,867	184,672	1,452,795

Sources: See Explanatory Notes on Data Collection and Estimation.

-- Not Applicable.

Table 21. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, January 1983
(Thousands of Barrels)

Commodity	From I to			From II to			From III to			From IV to			From V to				
	II	III	V	I	III	IV	V	I	II	IV	V	II	III	I	II	III	IV
Crude Oil (Tanker and Barge only)	110	0	0	0	36	0	0	0	392	1,489	0	0	0	0	0	0	0
Petroleum Products	7,399	424	0	0	3,254	6,062	2,373	0	82,480	23,620	0	2,384	1,136	248	1,259	629	0
Natural Gasoline and Isopentane	0	0	0	0	0	532	0	0	0	333	0	0	356	0	0	0	0
Unfractionated Stream	0	0	0	0	0	20	0	0	0	1,460	0	0	82	248	0	0	0
Plant Condensate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Liquefied Petroleum Gases	0	61	0	0	910	2,023	278	0	2,875	6,600	0	0	0	0	0	0	0
Unfinished Oils	9	0	0	0	0	0	0	0	264	0	0	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0	0	0	792	0	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	5,450	0	0	0	1,663	1,979	1,250	0	46,696	8,576	0	1,024	415	0	786	0	0
Finished Leaded Motor Gasoline	2,901	0	0	0	728	1,045	629	0	19,985	4,278	0	583	282	0	561	0	0
Finished Unleaded Motor Gasoline	2,549	0	0	0	935	934	621	0	26,711	4,298	0	441	133	0	225	0	0
Finished Aviation Gasoline	13	0	0	0	0	0	0	0	187	59	0	0	0	0	0	0	0
Naphtha-Type Jet Fuel	181	0	0	0	32	91	0	0	464	37	0	187	81	0	34	0	0
Kerosene-Type Jet Fuel	215	0	0	0	145	47	695	0	7,817	2,243	0	204	5	0	70	0	0
Kerosene	110	0	0	0	2	0	0	0	939	23	0	0	0	0	0	0	0
Distillate Fuel Oil	1,379	10	0	0	176	717	150	0	18,555	2,604	0	388	197	0	369	0	8
Residual Fuel Oil	0	206	0	0	134	584	0	0	2,756	427	0	476	0	0	0	629	0
Naphtha and Other Oils for Petro.																	
Feedstock	0	0	0	0	11	0	0	0	73	13	0	0	0	0	0	0	0
Special Naphthas	0	0	0	0	8	0	0	0	448	92	0	0	0	0	0	0	0
Lubricants	0	65	0	0	8	59	0	0	521	139	0	105	0	0	0	0	6
Wax	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	0	0	0	0	0	0	0	0	239	179	0	0	0	0	0	0	0
Miscellaneous Products	42	82	0	0	165	10	0	0	646	43	0	0	0	0	0	0	0
Total All Products	7,509	424	0	0	3,290	6,062	2,373	0	82,872	25,109	0	2,384	1,136	248	1,259	3,693	0
																	16,732

Sources: See Explanatory Notes on Data Collection and Estimation.

(Thousands of Barrels)

Source: See Explanatory Notes on Data Collection and Estimation.

(Thousands of Barrels)

Source: See Explanatory Notes on Data Collection and Estimation.

Table 24. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker and Barge Between PAD Districts, January 1983
(Thousands of Barrels)

Commodity	P.A.D. District I			P.A.D. District II			P.A.D. District III			P.A.D. District IV			P.A.D. District V		
	Receipts into PADD I	Shipments from PADD I	Net Receipts PADD I	Receipts into PADD II	Shipments from PADD II	Net Receipts PADD II	Receipts into PADD III	Shipments from PADD III	Net Receipts PADD III	Receipts into PADD IV	Shipments from PADD IV	Net Receipts PADD IV	Receipts into PADD V	Shipments from PADD V	Net Receipts PADD V
Crude Oil (Tanker and Barge only)	3,492	110	3,382	1,599	36	1,563	16,545	1,881	14,664	0	0	0	0	19,609	-19,609
Petroleum Products	86,363	7,823	78,540	32,155	11,689	20,466	6,921	108,484	-101,563	2,373	2,643	-270	3,643	816	2,827
Natural Gasoline	0	0	0	689	532	157	532	333	199	0	356	-356	0	0	0
Unfractionated Stream	0	0	0	1,542	20	1,522	268	1,460	-1,192	0	330	-330	0	0	0
Plant Condensate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Liquefied Petroleum Gases	3,785	61	3,724	6,600	3,211	3,389	2,084	9,475	-7,391	278	0	278	0	0	0
Unfinished Oils	264	9	255	9	0	9	0	264	-264	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	792	0	792	0	792	-792	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	48,359	5,450	42,909	14,441	4,892	9,549	1,979	56,296	-54,317	1,250	1,201	49	1,810	0	1,810
Finished Leaded Motor Gasoline	20,713	2,901	17,812	7,461	2,402	5,059	1,045	24,846	-23,801	629	843	-214	1,144	0	1,144
Finished Unleaded Motor Gasoline	27,646	2,549	25,097	6,980	2,490	4,490	934	31,450	-30,516	621	358	263	666	0	666
Finished Aviation Gasoline	187	13	174	72	0	72	0	246	-246	0	0	0	0	0	0
Naphtha-Type Jet Fuel	496	181	315	299	123	176	91	688	-597	0	115	-115	221	0	221
Kerosene-Type Jet Fuel	7,962	215	7,747	2,463	887	1,576	47	10,264	-10,217	695	75	620	274	0	274
Kerosene	941	110	831	133	2	131	0	962	-962	0	0	0	0	0	0
Distillate Fuel Oil	18,731	1,389	17,342	4,180	1,043	3,137	735	21,547	-20,812	150	566	-416	757	8	749
Residual Fuel Oil	3,519	206	3,313	427	718	-291	963	3,659	-2,696	0	0	0	476	802	-326
Naphtha and Other Oils for Petro.															
Feedstock Use	84	0	84	13	11	2	0	86	-86	0	0	0	0	0	0
Special Naphthas	456	0	456	92	8	84	0	540	-540	0	0	0	0	0	0
Lubricants	529	65	464	139	67	72	130	765	-635	0	0	0	105	6	99
Wax	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	239	0	239	179	0	179	0	418	-418	0	0	0	0	0	0
Miscellaneous Products	811	124	687	85	175	-90	92	689	-597	0	0	0	0	0	0
Total All Products	89,855	7,933	81,922	33,754	11,725	22,029	23,466	110,365	-86,899	2,373	2,643	-270	3,643	20,425	-16,782

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 25. Production of Residual Fuel Oil By Sulfur Content, January 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	PAD Rocky Mt.	
Residual Fuel Oil	4,244	170	4,414	104	2,547	191	378	3,220	1,004	7,008	3,581	406	78	12,077	313	8,966
0.00 to 0.30% Sulfur	334	40	374	0	103	0	0	103	111	496	473	111	9	1,200	58	847
0.31 to 1.00% Sulfur	2,328	2	2,330	104	581	0	235	920	887	1,173	794	188	4	3,046	60	2,525
Greater Than 1.00% Sulfur	1,582	128	1,710	0	1,863	191	143	2,197	6	5,339	2,314	107	65	7,831	195	5,594
																17,527

Source: See Explanatory Notes on Data Collection and Estimation.

Table 26. Stocks of Residual Fuel Oil By Sulfur Content, January 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	PAD Rocky Mt.	
Residual Fuel Oil - 0.00 to 0.30% Sulfur	467	44	511	0	140	0	0	140	65	184	91	15	14	369	93	1,603
Refinery	—	—	6,794	—	—	—	—	71	—	—	—	—	—	3	0	6,873
Bulk Terminal	—	—	7,305	—	—	—	—	211	—	—	—	—	—	372	93	8,476
Total																
Residual Fuel Oil - 0.31 to 1.00% Sulfur	2,393	4	2,397	56	694	0	62	812	199	1,151	1,565	18	2	2,935	108	8,867
Refinery	—	—	9,021	—	—	—	—	577	—	—	—	—	—	3,106	0	12,954
Bulk Terminal	—	—	11,418	—	—	—	—	1,389	—	—	—	—	—	6,041	108	21,821
Total																
Residual Fuel Oil - Greater than 1.00% Sulfur	864	78	942	0	1,422	359	103	1,884	102	3,409	2,695	184	28	6,418	341	13,258
Refinery	—	—	10,204	—	—	—	—	1,505	—	—	—	—	—	3,488	0	17,124
Bulk Terminal	—	—	11,146	—	—	—	—	3,389	—	—	—	—	—	9,906	341	30,382
Total																

Sources: See Explanatory Notes on Data Collection and Estimation.

— Not Applicable

Table 27. Movements of Residual Fuel Oil by Tanker and Barge Between PAD Districts, By Sulfur Content, January 1983
(Thousands of Barrels)

Commodity	From I to			From II to			From III to			From V to		
	II	III	V	I	III	V	I	New Eng	Cent Atl	Low Atl	II	III
Residual Fuel Oil	0	206	0	134	584	0	2,756	542	1,120	1,094	427	629
0.00 to 0.30% Sulfur	0	0	0	0	0	0	0	0	0	0	0	0
0.31 to 1.00% Sulfur	0	0	0	13	0	0	539	347	192	0	0	0
Greater Than 1.00% Sulfur	0	206	0	121	584	0	2,217	195	928	1,094	427	629

Source: See Explanatory Notes on Data Collection and Estimation.

Table 28. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, January 1983
(Thousands of Barrels)

Country	Residual Fuel Oil			Total
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%	
Arab OPEC				
Algeria	2,680	129	0	2,808
Iraq	0	0	0	0
Kuwait	0	0	0	0
Qatar	0	0	0	0
Saudi Arabia	0	0	0	0
United Arab Emirates	0	0	0	0
Subtotal Arab OPEC	2,680	129	0	2,808
Other OPEC				
Ecuador	0	0	299	299
Gabon	0	0	0	0
Indonesia	0	39	(s)	39
Iran	0	0	0	0
Nigeria	0	0	0	0
Venezuela	718	0	2,882	3,600
Subtotal Other OPEC	718	39	3,181	3,938
Other				
Angola	0	0	0	0
Australia	0	0	0	0
Bahamas	310	0	209	519
Bolivia	0	0	0	0
Brazil	700	0	0	700
Brunei	0	0	0	0
Canada	17	180	207	404
Congo	190	0	0	190
Egypt	0	0	0	0
France	0	0	0	0
Ghana	0	0	0	0
Liberia	0	0	0	0
Malaysia	170	0	0	170
Mexico	2	0	1,197	1,199
Netherlands	0	0	0	0
Netherlands Antilles	978	0	3,818	4,795
Norway	0	0	0	0
Oman	0	0	0	0
People's Republic of China	0	76	(s)	76
Peru	115	731	0	846
Puerto Rico	0	0	0	0
Romania	0	0	0	0
Spain	0	0	0	0
Trinidad	0	0	0	0
Tunisia	0	0	0	0
United Kingdom	0	0	0	0
Virgin Islands	1,476	1,612	1,907	4,995
Yugoslavia	0	0	0	0
Zaire	0	0	0	0
Other Western Hemisphere	235	161	0	397
Other Eastern Hemisphere	186	182	5	373
Subtotal Other	4,378	2,943	7,343	14,664
Total imports	7,775	3,111	10,524	21,410

59

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 29. Imports of Residual Fuel Oil by Sulfur Content by State of Entry, January 1983
(Thousands of Barrels)

State	Residual Fuel Oil				Total
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%		
PAD District I	7,071	2,633	9,390		19,094
Connecticut	0	0	0		0
Florida	0	193	2,161		2,354
Maine	0	0	428		428
Maryland	0	364	414		778
Massachusetts	348	161	1,062		1,572
New Jersey	385	932	1,091		2,408
New York	4,884	404	2,374		7,662
North Carolina	0	0	267		267
Pennsylvania	1,455	430	59		1,943
Rhode Island	0	0	64		64
South Carolina	0	0	484		484
Vermont	0	0	0		0
Virginia	0	150	985		1,135
PAD District II	17	180	58		255
Michigan	17	180	0		197
Minnesota	0	0	20		20
North Dakota	0	0	37		37
PAD District III	684	0	1,062		1,746
Louisiana	2	0	130		132
Texas	682	0	932		1,615
PAD District IV	0	0	9		9
Montana	0	0	9		9
PAD District V	2	297	5		305
Alaska	0	0	0		0
Arizona	2	0	0		2
California	0	0	0		0
Hawaii	0	297	5		302
Oregon	0	0	0		0
All PAD Districts	7,775	3,111	10,524		21,410

Note: Total may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.

Table 30. Stocks of Crude Oil and Petroleum Products by PAD District (New Basis), December 31, 1982
(Thousands of Barrels)

Commodity	PAD District I		PAD District II		PAD District III				PAD District IV		United States						
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast		La. Gulf Coast	No. La., Ark.	New Mexico	Total	PAD Dist. V	
										Rocky Mtn.	West Coast						
Crude Oil (incl. lease condensate)																	
Refinery	--	--	15,182	--	--	--	--	15,911	--	--	--	--	--	41,525	1,733	25,310	99,661
Tank Farms and Pipelines	--	--	2,303	--	--	--	--	61,035	--	--	--	--	--	100,810	10,302	30,819	205,269
Leases	--	--	65	--	--	--	--	1,610	--	--	--	--	--	17,535	1,456	1,805	22,471
Strategic Petroleum Reserve	--	--	0	--	--	--	--	0	--	--	--	--	--	293,827	0	0	293,827
Alaskan In-Transit	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	22,643	22,643
Total	--	--	17,550	--	--	--	--	78,556	--	--	--	--	--	453,697	13,491	80,577	643,871
Total Stocks, All Oils (excl. Crude Oil)																	
Refinery	42,866	3,622	46,488	886	42,571	6,293	20,032	69,782	10,287	71,175	47,632	5,371	1,441	135,906	14,515	65,365	332,056
Bulk Terminal	--	--	159,717	--	--	--	--	89,696	--	--	--	--	--	86,249	3,091	26,995	365,748
Pipeline	--	--	30,042	--	--	--	--	35,901	--	--	--	--	--	41,226	2,840	4,301	114,310
Natural Gas Processing Plant	201	55	256	0	249	49	1,180	1,478	2,059	997	647	80	193	3,976	228	94	6,032
Total	--	--	236,503	--	--	--	--	196,857	--	--	--	--	--	267,357	20,674	96,755	818,146
Natural Gasoline and Isopentane																	
Refinery	2	0	2	0	28	135	105	268	37	89	173	1	24	324	8	28	630
Bulk Terminal	--	--	18	--	--	--	--	1,515	--	--	--	--	--	1,876	0	0	3,409
Pipeline	--	--	0	--	--	--	--	414	--	--	--	--	--	415	182	5	1,016
Natural Gas Processing Plant	2	6	8	0	25	16	96	137	316	214	151	31	21	733	36	18	932
Total	--	--	28	--	--	--	--	2,334	--	--	--	--	--	3,348	226	51	5,987
Unfractionated Stream																	
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulk Terminal	--	--	0	--	--	--	--	1,555	--	--	--	--	--	444	0	0	1,999
Pipeline	--	--	0	--	--	--	--	94	--	--	--	--	--	551	0	0	645
Natural Gas Processing Plant	0	0	0	0	101	2	556	659	92	595	4	1	15	707	28	1	1,395
Total	--	--	0	--	--	--	--	2,308	--	--	--	--	--	1,702	28	1	4,039
Plant Condensate																	
Refinery	0	0	0	0	5	0	0	5	12	86	0	82	0	180	0	0	185
Bulk Terminal	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	0	0
Pipeline	--	--	0	--	--	--	--	0	--	--	--	--	--	1,153	0	0	1,153
Natural Gas Processing Plant	0	0	0	0	3	0	4	7	40	36	4	9	0	89	8	0	104
Total	--	--	0	--	--	--	--	12	--	--	--	--	--	1,422	8	0	1,442
Liquefied Petroleum Gases																	
Refinery	887	16	903	199	1,621	134	662	2,616	252	1,615	2,408	22	23	4,320	353	1,038	9,230
Bulk Terminal	--	--	2,522	--	--	--	--	18,848	--	--	--	--	--	51,331	102	1,541	74,344
Pipeline	--	--	2,531	--	--	--	--	6,825	--	--	--	--	--	6,081	423	0	15,860
Natural Gas Processing Plant	184	49	233	0	117	31	523	671	1,360	148	487	38	157	2,190	115	75	3,284
Total	--	--	6,189	--	--	--	--	28,960	--	--	--	--	--	63,922	993	2,654	102,718
Ethane																	
Refinery	0	0	0	0	8	0	0	8	0	377	0	0	0	377	0	0	385
Bulk Terminal	--	--	0	--	--	--	--	913	--	--	--	--	--	2,915	0	0	3,828
Pipeline	--	--	0	--	--	--	--	1,135	--	--	--	--	--	373	0	0	1,508

See footnotes at end of table.

Table 30. Stocks of Crude Oil and Petroleum Products by PAD District (New Basis), December 31, 1982
(Thousands of Barrels) (continued)

Commodity	PAD District I		PAD District II				PAD District III				PAD District IV		United States				
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.		New Mexico	Total	PAD Dist. V	
																Rocky Mt.	West Coast
Ethane																	
Natural Gas Processing Plant	0	0	0	0	25	0	28	53	195	1	0	0	0	0	196	1	250
Total	—	—	0	—	—	—	—	2,109	—	—	—	—	—	—	3,861	1	5,971
Propane for Petrochemical Feedstock Use																	
Refinery	55	0	55	0	90	0	2	92	0	5	417	0	0	422	0	0	569
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	55	—	—	—	—	92	—	—	—	—	—	422	0	0	569
Propane For Other Uses																	
Refinery	650	8	658	4	1,191	39	302	1,536	77	689	1,005	3	5	1,779	162	235	4,370
Bulk Terminal	—	—	2,224	—	—	—	—	13,064	—	—	—	—	—	27,511	101	621	43,521
Pipeline	—	—	2,418	—	—	—	—	3,633	—	—	—	—	—	1,825	121	0	7,997
Natural Gas Processing Plant	172	41	213	0	55	20	206	281	642	37	373	21	79	1,152	75	59	1,780
Total	—	—	5,513	—	—	—	—	18,514	—	—	—	—	—	32,267	459	915	57,668
Butane For Petro. Feed Use																	
Refinery	0	0	0	0	0	17	0	17	0	22	0	2	0	24	0	2	43
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	0	—	—	—	—	17	—	—	—	—	—	24	0	2	43
Butane For Other Uses																	
Refinery	182	0	182	162	208	53	194	617	74	379	543	4	4	1,004	155	601	2,559
Bulk Terminal	—	—	298	—	—	—	—	1,409	—	—	—	—	—	8,188	1	847	10,743
Pipeline	—	—	98	—	—	—	—	1,123	—	—	—	—	—	1,126	144	0	2,491
Natural Gas Processing Plant	11	6	17	0	17	9	211	237	360	60	82	9	34	545	38	9	846
Total	—	—	595	—	—	—	—	3,386	—	—	—	—	—	10,863	338	1,457	16,639
Butane-Propane Mixtures For Petro. Feed Use																	
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Butane-Propane Mixtures For Other Uses																	
Refinery	0	0	0	0	0	0	0	0	1	10	11	0	7	29	14	174	217
Bulk Terminal	—	—	0	—	—	—	—	327	—	—	—	—	—	124	0	0	451
Pipeline	—	—	0	—	—	—	—	20	—	—	—	—	—	1,415	0	0	1,435
Natural Gas Processing Plant	0	0	0	0	11	0	0	11	4	1	0	1	0	6	0	5	22
Total	—	—	0	—	—	—	—	358	—	—	—	—	—	1,574	14	179	2,125
Ethane-Propane Mixtures																	
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulk Terminal	—	—	0	—	—	—	—	1,636	—	—	—	—	—	7,862	0	0	9,498
Pipeline	—	—	0	—	—	—	—	523	—	—	—	—	—	968	122	0	1,613
Natural Gas Processing Plant	0	0	0	0	0	65	65	65	69	1	0	0	0	106	0	0	171
Total	—	—	0	—	—	—	—	2,224	—	—	—	—	—	8,936	122	0	11,282

See footnotes at end of table.

Table 30. Stocks of Crude Oil and Petroleum Products by PAD District (New Basis), December 31, 1982
(Thousands of Barrels) (continued)

Commodity	PAD District I		Total		PAD District II				Total		PAD District III					Total		PAD District IV		United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Rocky Mt.	Dist. V	West Coast					
Isobutane																				
Refinery	0	8	8	8	33	124	25	164	346	100	133	432	13	7	685	22	26	1,087		
Bulk Terminal	--	--	0	--	--	--	--	--	1,499	--	--	--	--	--	4,731	0	73	6,303		
Pipeline	--	--	15	--	--	--	--	391	--	--	--	--	--	--	374	36	0	816		
Natural Gas Processing Plant	1	2	3	0	9	2	13	24	90	48	32	7	8	8	185	1	2	215		
Total	--	--	26	--	--	--	--	2,260	--	--	--	--	--	--	5,975	59	101	8,421		
Other Hydrocarbons and Alcohol																				
Refinery	83	26	109	0	70	0	0	70	1	86	40	0	0	0	127	0	5	311		
Total	--	--	109	--	--	--	--	70	--	--	--	--	--	--	127	0	5	311		
Unfinished Oils																				
Refinery	3,265	315	3,580	43	2,570	122	1,139	3,874	791	6,228	4,266	141	95	11,521	439	4,689	24,103			
Naphthas and Lighter	1,896	9	1,905	0	2,058	8	752	2,818	416	6,083	1,343	36	5	7,883	334	3,794	16,734			
Kerosene and Lighter Gas Oils	5,794	357	6,151	87	4,708	325	1,802	6,922	848	11,502	6,278	673	138	19,439	818	11,229	44,559			
Heavy Gas Oils	1,711	309	2,020	4	2,898	21	1,247	4,170	542	3,560	3,219	45	0	7,366	1,095	5,230	19,881			
Residuum	12,666	990	13,656	134	12,234	476	4,940	17,784	2,597	27,373	15,106	895	238	46,209	2,686	24,942	105,277			
Total																				
Motor Gasoline Blending Components																				
Refinery	4,956	105	5,061	32	5,903	683	1,976	8,594	1,369	8,308	6,388	100	193	16,358	2,473	7,614	40,100			
Bulk Terminal	--	--	220	--	--	--	--	332	--	--	--	--	--	441	0	308	1,301			
Pipeline	--	--	0	--	--	--	--	306	--	--	--	--	--	35	0	0	341			
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Total	--	--	5,281	--	--	--	--	9,232	--	--	--	--	--	16,834	2,473	7,922	41,742			
Aviation Gasoline Blending Components																				
Refinery	5	0	5	0	140	0	9	149	37	70	209	0	0	316	0	22	492			
Bulk Terminal	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	0	0			
Pipeline	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	0	0			
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Total	--	--	5	--	--	--	--	149	--	--	--	--	--	316	0	22	492			
Total Finished Motor Gasoline																				
Refinery	6,031	327	6,358	107	5,920	1,315	3,744	11,086	2,366	8,160	6,395	994	208	18,123	2,884	8,373	46,824			
Bulk Terminal	--	--	42,363	--	--	--	--	30,964	--	--	--	--	--	13,345	1,849	12,613	101,134			
Pipeline	--	--	15,380	--	--	--	--	15,853	--	--	--	--	--	19,714	1,313	2,264	54,524			
Total Finished Motor Gasoline																				
Natural Gas Processing Plant	15	0	15	0	0	0	0	0	0	0	0	0	0	0	40	0	55			
Total	--	--	64,116	--	--	--	--	57,903	--	--	--	--	--	51,182	6,086	23,250	202,537			
Finished Leaded Motor Gasoline																				
Refinery	2,534	197	2,731	48	2,778	852	2,125	5,803	1,353	3,869	3,090	766	102	9,180	1,889	3,553	23,156			
Bulk Terminal	--	--	20,080	--	--	--	--	16,996	--	--	--	--	--	6,699	1,193	6,540	51,508			
Pipeline	--	--	7,199	--	--	--	--	8,576	--	--	--	--	--	9,725	835	1,113	27,448			
Natural Gas Processing Plant	6	0	6	0	0	0	0	0	0	0	0	0	0	0	37	0	43			
Total	--	--	30,016	--	--	--	--	31,375	--	--	--	--	--	25,604	3,954	11,206	102,155			

See footnotes at end of table.

Table 30. Stocks of Crude Oil and Petroleum Products by PAD District (New Basis), December 31, 1982
(Thousands of Barrels) (continued)

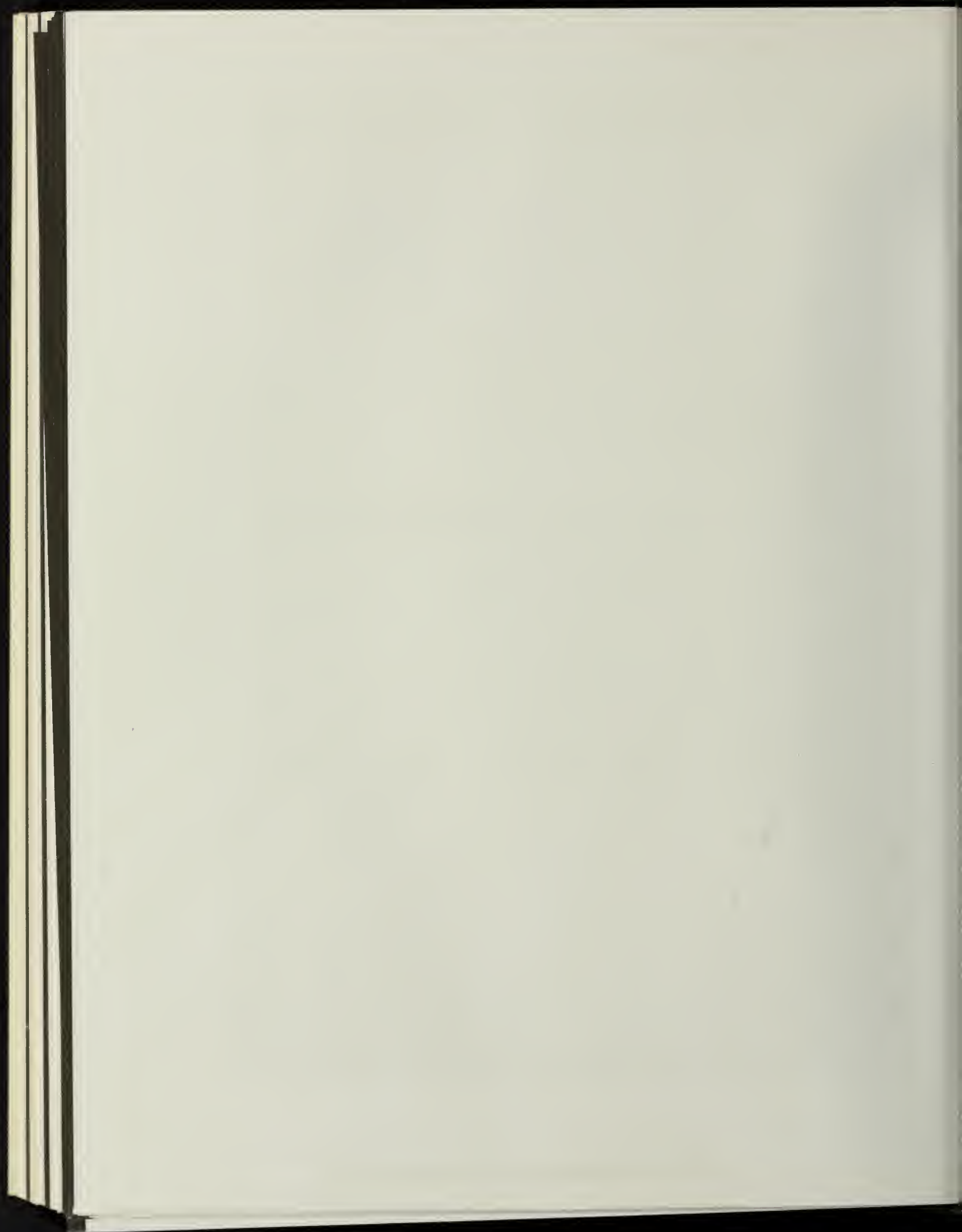
Commodity	PAD District I		PAD District II				PAD District III				PAD District IV		United States				
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Gulf Coast		La. Gulf Coast	No. La., Ark.		New Mexico	Total	PAD Dist. IV	
									Texas Inland	Texas Coast						Rocky Mt.	West Coast
Finished Unleaded Motor Gasoline																	
Refinery	3,497	130	3,627	59	3,142	463	1,619	5,283	1,013	4,291	3,305	228	106	8,943	995	4,820	23,668
Bulk Terminal	--	--	22,283	--	--	--	--	13,968	--	--	--	--	--	6,646	656	6,073	49,626
Pipeline	--	--	8,181	--	--	--	--	7,277	--	--	--	--	--	9,989	478	1,151	27,076
Natural Gas Processing Plant	9	0	9	0	0	0	0	0	0	0	0	0	0	0	3	0	12
Total	--	--	34,100	--	--	--	--	26,528	--	--	--	--	--	25,578	2,132	12,044	100,382
Finished Aviation Gasoline																	
Refinery	12	0	12	0	81	0	29	110	22	365	92	0	0	479	44	223	868
Bulk Terminal	--	--	416	--	--	--	--	413	--	--	--	--	--	96	23	391	1,339
Pipeline	--	--	0	--	--	--	--	19	--	--	--	--	--	14	0	0	33
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	74	0	0	0	0	74	0	0	74
Total	--	--	428	--	--	--	--	542	--	--	--	--	--	663	67	614	2,314
Naphtha-Type Jet Fuel																	
Refinery	251	36	287	0	416	29	270	715	292	520	467	190	128	1,597	251	831	3,681
Bulk Terminal	--	--	422	--	--	--	--	386	--	--	--	--	--	212	13	662	1,695
Pipeline	--	--	675	--	--	--	--	209	--	--	--	--	--	558	85	286	1,813
Total	--	--	1,384	--	--	--	--	1,310	--	--	--	--	--	2,367	349	1,779	7,189
Kerosene-Type Jet Fuel																	
Refinery	1,191	0	1,191	43	1,172	104	202	1,521	305	1,813	2,252	17	23	4,410	379	3,019	10,520
Bulk Terminal	--	--	5,089	--	--	--	--	3,447	--	--	--	--	--	1,507	150	1,782	11,975
Pipeline	--	--	3,346	--	--	--	--	2,342	--	--	--	--	--	3,087	109	622	9,506
Total	--	--	9,626	--	--	--	--	7,310	--	--	--	--	--	9,004	638	5,423	32,001
Kerosene																	
Refinery	307	90	397	0	592	44	223	859	52	840	449	8	54	1,403	13	97	2,769
Bulk Terminal	--	--	4,436	--	--	--	--	1,736	--	--	--	--	--	408	29	49	6,658
Pipeline	--	--	593	--	--	--	--	194	--	--	--	--	--	576	0	1	1,364
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1
Total	--	--	5,426	--	--	--	--	2,789	--	--	--	--	--	2,388	42	147	10,792
Distillate Fuel Oils																	
Refinery	8,086	505	8,591	53	7,579	2,119	4,670	14,421	1,381	8,356	5,192	1,311	353	16,593	2,463	5,981	48,049
Bulk Terminal	--	--	68,573	--	--	--	--	24,169	--	--	--	--	--	9,344	860	6,618	109,564
Pipeline	--	--	7,517	--	--	--	--	9,630	--	--	--	--	--	8,983	728	1,106	27,964
Distillate Fuel Oils																	
Natural Gas Processing Plant	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0	0	2
Total	--	--	84,681	--	--	--	--	48,221	--	--	--	--	--	34,921	4,051	13,705	185,579
Residual Fuel Oils																	
Refinery	4,463	137	4,600	111	2,500	379	159	3,149	317	5,150	4,460	279	40	10,246	634	7,620	26,249
Bulk Terminal	--	--	31,086	--	--	--	--	2,234	--	--	--	--	--	6,451	0	2,191	41,962
Pipeline	--	--	0	--	--	--	--	0	--	--	--	--	--	1	0	17	18
Total	--	--	35,686	--	--	--	--	5,383	--	--	--	--	--	16,698	634	9,828	68,229

See footnotes at end of table.

Table 30. Stocks of Crude Oil and Petroleum Products by PAD District (New Basis), December 31, 1982
(Thousands of Barrels) (continued)

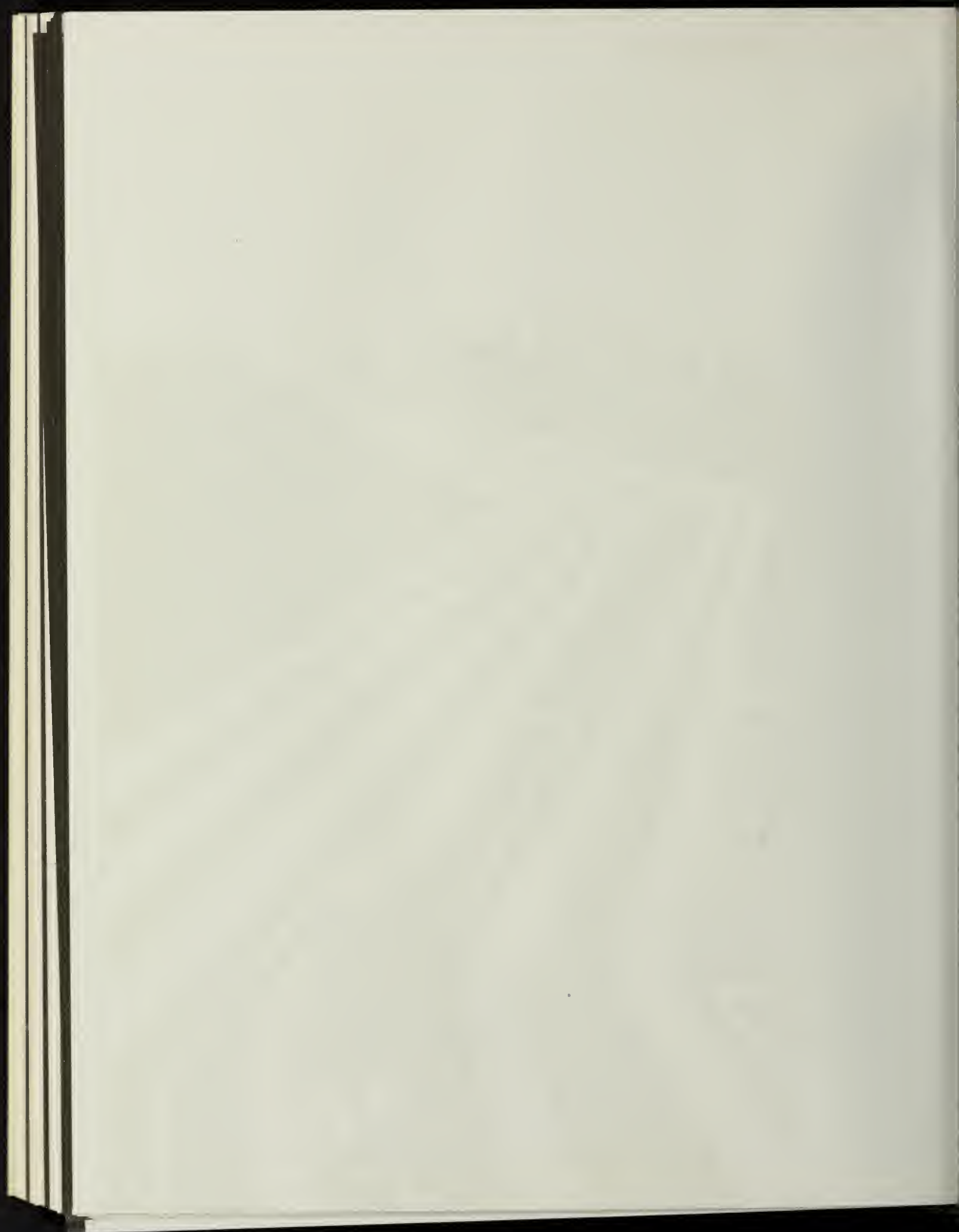
Commodity	PAD District I		PAD District II		PAD District III		PAD District IV		United States								
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total		PAD District III			PAD District IV				
										Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Rocky Mts.	Dist. V West Coast	
Naptha < 400 Deg. Petro. Feedstock																	
Refinery	102	0	102	0	97	0	85	182	108	969	330	9	0	1,416	0	267	1,967
Total	102	0	102	0	97	0	85	182	108	969	330	9	0	1,416	0	267	1,967
Other Oils > 400 Deg. Petro. Feedstock																	
Refinery	5	0	5	0	185	0	1	186	343	832	224	42	0	1,441	0	548	2,180
Total	5	0	5	0	185	0	1	186	343	832	224	42	0	1,441	0	548	2,180
Special Naphtahas																	
Refinery	28	42	70	0	210	0	165	375	38	1,284	56	139	0	1,517	9	231	2,202
Bulk Terminal	--	--	823	--	--	--	--	255	--	--	--	--	--	23	0	34	1,135
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	137	0	0	0	0	137	0	0	137
Total	--	--	893	--	--	--	--	630	--	--	--	--	--	1,677	9	265	3,474
Lubricants																	
Refinery	1,180	1,090	2,270	0	757	0	719	1,476	47	3,887	1,339	285	0	5,558	81	721	10,106
Bulk Terminal	--	--	1,240	--	--	--	--	1,001	--	--	--	--	--	316	3	515	3,075
Total	--	--	3,510	--	--	--	--	2,477	--	--	--	--	--	5,874	84	1,236	13,181
Wax																	
Refinery	26	168	194	0	18	0	61	79	26	226	194	0	0	446	10	57	786
Total	--	--	194	--	--	--	--	79	--	--	--	--	--	446	10	57	786
Petroleum Coke																	
Refinery	801	0	801	0	816	132	1,026	1,974	1	137	523	268	0	929	776	2,241	6,721
Total	801	0	801	0	816	132	1,026	1,974	1	137	523	268	0	929	776	2,241	6,721
Asphalt and Road Oil																	
Refinery	1,474	38	1,512	206	2,163	731	971	4,071	635	573	976	679	157	3,020	1,451	1,321	11,375
Bulk Terminal	--	--	2,434	--	--	--	--	2,822	--	--	--	--	--	410	62	166	5,894
Total	--	--	3,946	--	--	--	--	6,893	--	--	--	--	--	3,430	1,513	1,487	17,269
Miscellaneous Products																	
Refinery	310	52	362	1	64	12	15	92	49	436	359	50	0	894	0	186	1,534
Bulk Terminal	--	--	75	--	--	--	--	19	--	--	--	--	--	45	0	125	264
Pipeline	--	--	0	--	--	--	--	15	--	--	--	--	--	58	0	0	73
Natural Gas Processing Plant	0	0	0	0	3	0	0	3	38	4	1	1	0	44	1	0	48
Total	--	--	437	--	--	--	--	129	--	--	--	--	--	1,041	1	311	1,919
Total Stocks, All Oils	--	--	254,053	--	--	--	--	275,413	--	--	--	--	--	721,054	34,165	177,332	1,462,017

1 Crude oil data are not collected by Refinery District
Sources: See Explanatory Notes on Data Collection and Estimation.
-- Not Applicable.



Glossary





Definitions of Petroleum Products and Other Terms

Alcohol. The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group; $\text{CH}-(\text{CH})_n-\text{OH}$. *Alcohol* includes methanol and ethanol.

Alkylation. A refinery process for chemically combining isoparaffin with olefin hydrocarbons. The product, alkylate, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

API Gravity. An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it may be calculated in terms of the following formula:

$$\text{Deg API} = \frac{141.5}{\text{sp gr } 60\text{F}/60\text{F}} - 131.5$$

Aromatics. Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene.

Asphalt. A dark-brown-to-black cement-like material, containing bitumens as the predominant constituents, obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. The conversion factor for asphalt is 5.5 barrels of 42 U.S. gallons per short ton.

ASTM. The acronym for the American Society for Testing and Materials.

Aviation Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation gasoline.

Aviation Gasoline, Finished. All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G-5572. Excludes blending components which will be used in blending or compounding into finished aviation gasoline.

Barrel. A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt and wax to barrels are given in the definitions for these products.

Barrels per Calendar Day. The maximum number of barrels of input that can be processed in a twenty-four hour period after making allowances for the following limitations: downstream limitations, environmental constraints, types and grades of inputs, planned and unplanned downtime, and types and grades of products.

Barrels Per Stream Day. The amount a unit can process running at full capacity under optimal crude and product slate conditions.

Bi-metallic. A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of two metals (e.g., platinum, rhenium).

Butane. A normally gaseous paraffinic hydrocarbon, C_4H_{10} . It is extracted from natural gas or refinery gas streams. Butane is covered by ASTM Specification D1835 and Gas Processors Association Specification for commercial butane.

Isobutane. A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 10.9 degrees F. This classification includes mixtures of gases that contain 80 percent liquid volume or more isobutane. It is extracted from natural gas and refinery gas streams.

Normal Butane. A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 31.1 degrees F. This classification includes mixtures of gases that contain 80 percent or more normal butane.

Other Butanes. All butanes not included as normal butane or isobutane.

Butane-Propane Mixtures. Mixtures consisting exclusively of butane and propane that conform to ASTM Specification D1835 and Gas Processors Association Specification for commercial butane-propane mixtures. They are extracted from natural gas and refinery gas streams.

Butylene. An olefinic hydrocarbon, C_4H_8 , recovered from refinery processes.

Catalytic Cracking. The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil.

Catalytic Hydrocracking. A refining process for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel and/or high grade fuel oil. Hydrocracking is an efficient, relatively low temperature process using hydrogen and a catalyst.

Catalytic Hydrotreating. A process for treating petroleum fractions (e.g., distillate fuel oil and residual fuel oil) and unfinished oils (e.g., naphthas, reformer feeds and heavy gas oil) in the presence of catalysts and substantial quantities of hydrogen to upgrade their quality.

Catalytic Reforming. The use of controlled heat and pressure with catalysts to effect the rearrangement of certain hydrocarbon molecules without altering their composition appreciably; the conversion of low-octane

gasoline fractions into higher octane stocks suitable for blending into finished gasoline; also the conversion of naphthas to obtain a more volatile product of higher octane number.

Conventional. A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of a metal and a non-metal (e.g., platinum, alumina).

Coal. A generic term applied to carbonaceous rocks that were formed by the partial or complete decomposition of vegetation. These stratified carbonaceous rocks are either solid or brittle and are highly combustible. Includes lignite, bituminous coal, and anthracite coal which conform to ASTM Specification D388.

Crude Distillation. The refining process of separating crude oil components by heating and subsequent condensing of the fractions by cooling.

Crude Oil (including Lease Condensate). A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite and oil shale. Drip gas is also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign according to the following:

Domestic. Crude oil produced in the United States or from its outer continental shelf as defined in 43 U.S.C. 1331.

Foreign. Crude oil produced outside the United States.

Delayed Cooking. A process to produce low Conradson carbon gas for catalytic cracking feedstock and for gasoline.

Distillate Fuel Oil. A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1, No. 2, and No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuel.

No. 1 Fuel Oil. A light distillate fuel oil intended for use in vaporizing pot-type burners. ASTM Specification D396 specifies for this grade maximum distillation temperatures of 420 degrees F. at the 10-percent point and 550 degrees F. at the 90-percent point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100 degrees F.

No. 2 Fuel Oil. A distillate fuel oil for use in atomizing-type burners for domestic heating or for moderate capacity commercial-industrial burner units. ASTM

Specification D396 specifies for this grade distillation temperatures at the 90-percent point between 540 degrees and 640 degrees F., and kinematic viscosities between 2.0 and 3.6 centistokes at 100 degrees F.

No. 1 and No. 2 Diesel Fuel Oils. Distillate fuel oils used in compression-ignition engines, as given by ASTM Specification D975:

No. 1-D. A volatile distillate fuel oil with a boiling range between 300-575 degrees F. and used in high-speed diesel engines generally operated under wide variations in speed and load. Includes type C-B diesel fuel used for city buses and similar operations. Properties are defined in ASTM Specifications D975.

No. 2-D. A gas oil type distillate of lower volatility with distillation temperatures at the 90-percent point between 540-640 degrees F. for use in high-speed diesel engines generally operated under uniform speed and load conditions. Includes Type R-R diesel fuel used for railroad locomotive engines, and Type T-T for diesel-engine trucks. Properties are defined in ASTM Specification D975.

No. 4 Fuel Oil. A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D396 or Federal Specification VV-F-815C; its kinematic viscosity is between 5.8 and 26.4 centistokes at 100 degrees F. Also included is No. 4-D, a fuel oil for low- and medium-speed diesel engines that conforms to ASTM Specification D975.

Eastern Hemisphere. That half of the earth east of the Atlantic Ocean which includes Europe, Asia, Africa, and Australia. The Hawaiian Foreign Trade Zone is in this hemisphere.

Electric Energy (Purchased). Electricity purchased for refinery operations that is not produced within the refinery complex.

Ethane. A normally gaseous paraffinic compound (C₂H₆) extracted from natural gas and refinery gas streams. "Ethane" includes any products containing 90 percent liquid volume or more ethane.

Ethane-Propane Mixtures. Mixtures of ethane and propane in which neither component is 90 percent or more of the liquid volume. It is extracted from natural gas and refinery gas streams.

Ethylene. An olefinic hydrocarbon, (C₂H₄) recovered from refinery or petrochemical processes.

Field Production. Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, and new supply of other hydrocarbons and alcohol.

Fluid Coking. A thermal process utilizing the fluidized-solids technique for continuous conversion of heavy, low-grade oils into lighter products.

Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation or motor gasoline.

Gas Oil. A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. Derives its name from having originally been used in the manufacture of illuminating gas. Now supplies distillate-type fuel oils and diesel fuel, also cracked to produce gasoline.

Imported Crude Oil Burned as Fuel. The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. *Imported crude oil burned as fuel* includes lease condensate and liquid hydrocarbons produced from tar sand oil, gilsonite, and oil shale.

Isomerization. A refining process which alters the fundamental arrangement of atoms in the molecule. Used to convert normal butane into isobutane, an alkylation process feedstock, and normal pentane and hexane into isopentane and isohexane, high-octane gasoline components.

Kerosene. A petroleum distillate that boils at a temperature between 300-550 degrees F., that has a flash point higher than 100 degrees F. by ASTM Method D56, that has a gravity range from 40-46 degrees API, and that has a burning point in the range of 150-175 degrees F. Included are the two classifications recognized by ASTM D-3699: No. 1-K and No. 2-K, and all grades of kerosene called range or stove oil which have properties similar to No. 1 fuel oil, but with a gravity of about 43 degrees API and a maximum end-point of 625 degrees F. Kerosene is used in space heaters, cook stoves, and water heaters and is suitable for use as an illuminant when burned in wick lamps.

Kerosene-Type Jet Fuel. A quality kerosene product with an average gravity of 40.7 degrees API, a 10 percent distillation temperature of 400 degrees F. It is covered by ASTM Specification D1655 and Military Specifications MIL-T-5624L (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type; it is used primarily for commercial turbojet and turbo-prop aircraft engines.

Lease Condensate. A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

Liquefied Petroleum Gases (LPG). Propane, propylene, butanes, butylene, butane-propane mixtures, ethane-propane mixtures, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

Liquefied Refinery Gases (LRG). Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration they are retained in the liquid state. The reported categories are ethane and/or ethylene, propane and/or propylene, butane and/or butylene, butane-propane mixtures, and isobutane. Excludes still gases used for chemical or rubber manufacture which are reported as a petrochemical feedstock and also excludes liquefied gases ready for blending into gasoline which are reported as gasoline blending components. Liquefied refinery gases are reported for use as petrochemical feedstocks or other uses.

Lubricating Oils. A substance used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. *Lubricants* includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. The three categories include Bright Stock, Neutral, and Other.

Bright Stock. A refined, high viscosity lubricating oil base stock that is usually made from residuum by a treatment such as deasphalting, acid treatment, or solvent extraction.

Neutral. A distillate lubricating oil base stock with a viscosity that is usually not above 550 Saybolt Universal Seconds (SUS) at 100 degrees F. It is prepared by a treatment such as hydrofining, acid treatment, or solvent extraction.

Other. A lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils.

Middle Distillates. A general classification that includes distillate fuel oil and kerosene.

Miscellaneous Products. Includes all finished products not classified elsewhere, e.g., petrolatum, absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, speciality oils and medicinal oils.

Motor Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished motor gasoline. Pool gasoline is included in this category.

Motor Gasoline, Finished. A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition engines. Specifications for motor gasoline, as given in ASTM Specification D439 or Federal Specification VV-G-1690B, include a boiling range of 122 degrees to 158 degrees F. at the 10-percent point to 365 degrees to 374 degrees F. at the 90-percent point and a Reid vapor pressure range from 9 to 15 psi. *Motor gasoline* includes finished leaded gasoline, finished unleaded gasoline, and gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Finished Leaded Gasoline. Contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon. The actual lead content of any given gallon, however, may vary as a function of the size of the producer and company according to specific Environmental Protection Agency waiver provisions. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Finished Unleaded Gasoline. Contains not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes unleaded gasohol. Blend stock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Gasohol. A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol) in which 10 percent or more of the product is alcohol.

Motor Gasoline, Total. Includes finished leaded motor gasoline, finished unleaded motor gasoline, motor gasoline blending components, and gasohol.

Naphtha-Type Jet Fuel. A fuel in the heavy naphtha boiling range with an average gravity of 52.8 degrees API and 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees F., meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

Natural Gas. A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

Natural Gas Field Facility. A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, butane, natural gasoline, etc., and to control the quality of natural gas to be marketed.

Natural Gas Plant Liquids. Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials, and are classified as follows: Ethane, propane, ethane-propane mix, isobutane, butane, butane-propane mix, isopentane, natural gasoline, plant condensate, unfractionated stream, and other products from natural gas processing plants (i.e., products meeting the standards of finished petroleum products produced at natural gas processing plants, such as finished

motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

Natural Gasoline and Isopentane. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, C₅H₁₂, obtained by fractionation of natural gasoline or isomerization of normal pentane.

OPEC. The acronym for the Organization of Petroleum Exporting Countries, oil-producing and exporting countries that have organized for the purpose of negotiating with oil companies on matters of oil production, prices, and future concession rights. Current members are Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

Operable Distillation Capacity. The maximum amount of input that can be processed by a crude oil distillation unit in a 24-hour period, making allowances for processing limitations due to types and grades of inputs, limitations of downstream facilities, scheduled and unscheduled downtimes, and environmental constraints. Includes any shutdown capacity that could be placed in operation within days.

Other Hydrocarbons. Materials received by a refinery and consumed as raw materials. Includes hydrogen, coal tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

Petrochemical Feedstock Use. Chemical feedstocks derived from petroleum, principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are *Naphtha-less than 400 degrees F. end-point* and *Other oils-over 400 degrees F. end-point*.

Naphtha-Less Than 400 Degrees F. End-Point. A naphtha with an end point of less than 400 degrees F. that is reported as used as a petrochemical feedstock.

Other Oils-Over 400 Degrees F. End-Point. Oils with an end point over 400 degrees F. that is reported as used as a petrochemical feedstock.

Petroleum Coke. A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is five barrels of 42 U.S. gallons per short ton.

Marketable Coke. Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This *green* coke may be sold or further purified by calcining.

Catalyst Coke. In many catalytic operations (i.e., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refinery process. This carbon or coke is not recoverable in a concentrated form.

Petroleum Products. Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, natural gasoline and isopentane, plant condensate, unfractionated stream, liquefied petroleum gases, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, naphtha less than 400° F. end-point, other oils-over 400° F. end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Petroleum Refinery. An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

Plant Condensate. One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

Petroleum Refinery. An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas plant liquids, other hydrocarbons, and alcohol.

Plant Condensate. One of the natural gas plant liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

Primary Stocks. Stocks of crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tankfarms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in transit from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. *Primary Stocks* excludes stocks of foreign origin that are held in bonded warehouse storage.

Propane. A normally gaseous paraffinic compound, C₃H₈, which includes all products covered by NGPA Specification for commercial and HD-5 propane and ASTM Specification D1835. It is used primarily as a fuel and as a petrochemical feedstock.

Propylene. An olefinic hydrocarbon, C₃H₆, recovered from refinery or petrochemical processes.

Residual Fuel Oil. The topped crude of refinery operation which includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D396 and Federal Specification VV-F-815C, Navy Special fuel oil as defined in Military

Specification MIL-F-859E including Amendment 2 (NATO Symbol F-77), and Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Includes imported crude oil to be burned as a fuel.

Road Oil. Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades from 0, the most liquid, to 5, the most viscous.

Special Naphthas. All finished products within the gasoline range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point and have a boiling range of 90 degrees to 220 degrees F. *Special naphthas* includes all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

Steam (Purchased). Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

Still Gas (Refinery Gas). Any form or mixture of gas produced in refineries by distillation cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, butane, butylene, propane, propylene, etc. Still gas is reported for petrochemical feedstock use and/or refinery fuel use.

Petrochemical Feedstock Use. Includes all refinery streams which are used by chemical or rubber manufacturing operations for further processing, less the amount of such streams returned to the source refinery. Finished petrochemical products are not included. For example, polyethylene, butadiene, etc., are considered petrochemical products; therefore, only their feed-stock equivalents are included.

Fuel Use. All other still gas.

Strategic Petroleum Reserve (SPR). Stocks (currently, only crude oil) maintained by the Federal Government for use during periods of major supply interruption.

Thermal Cracking. A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking is used to increase the yield of gasoline obtainable from crude oil.

Unfinished Oils. Includes all oils requiring further processing, except those requiring only mechanical blending.

Unfractionated Streams. Mixtures of unsegregated natural gas liquid components excluding those included in plant condensate. This product is extracted from natural gas.

Vacuum Distillation. Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique, with its relatively low temperatures, prevents cracking or decomposition of the charge stock.

Visbreaking. A thermal cracking process in which heavy vacuum-still bottoms produced on the primary distillation unit are cracked to increase production of distillate products.

Wax. A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42-gallon barrel.

Microcrystalline Wax. Wax extracted from certain petroleum residues having a finer and less apparent

crystalline structure than paraffin wax and having the following physical characteristics:

Penetration at 77 degrees F. (D-1321)-60 maximum. Viscosity at 210 degrees F. in Saybolt Universal Seconds (SUS) (D-88)-60 SUS (10.22 centistokes) minimum to 150 SUS (31.8 centistokes) maximum. Oil content (D-721)-5 percent minimum.

Crystalline-Fully Refined Wax. A light-colored paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D-88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D-721)-0.5 percent maximum. Other + 20 color, Saybolt minimum.

Crystalline-Other Wax. A paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D-88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D-721)-0.51 percent minimum to 15 percent maximum.

Western Hemisphere. That half of the earth that includes North and South America and the surrounding waters.

Bureau of Mines Petroleum Refining Districts and PAD Districts

The following are the Bureau of Mines petroleum refining districts which make up the PAD districts:

PAD District I

East Coast: District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

Appalachian #1: The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

PAD District II

Appalachian #2: The following counties of the State of Ohio: Erie, Huron, Crawford, Marion, Delaware, Franklin, Pickaway, Ross, Pike, Scioto, and all counties east thereof.

Indiana—Illinois—Kentucky: The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and that part of the State of Ohio not included in the Appalachian District.

Minnesota—Wisconsin—North and South Dakota: The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

Oklahoma—Kansas—Missouri: The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

PAD District III

Texas Inland: The State of Texas except the Texas Gulf Coast District.

Texas Gulf Coast: The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

Louisiana Gulf Coast: The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

North Louisiana—Arkansas: The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

New Mexico: The State of New Mexico.

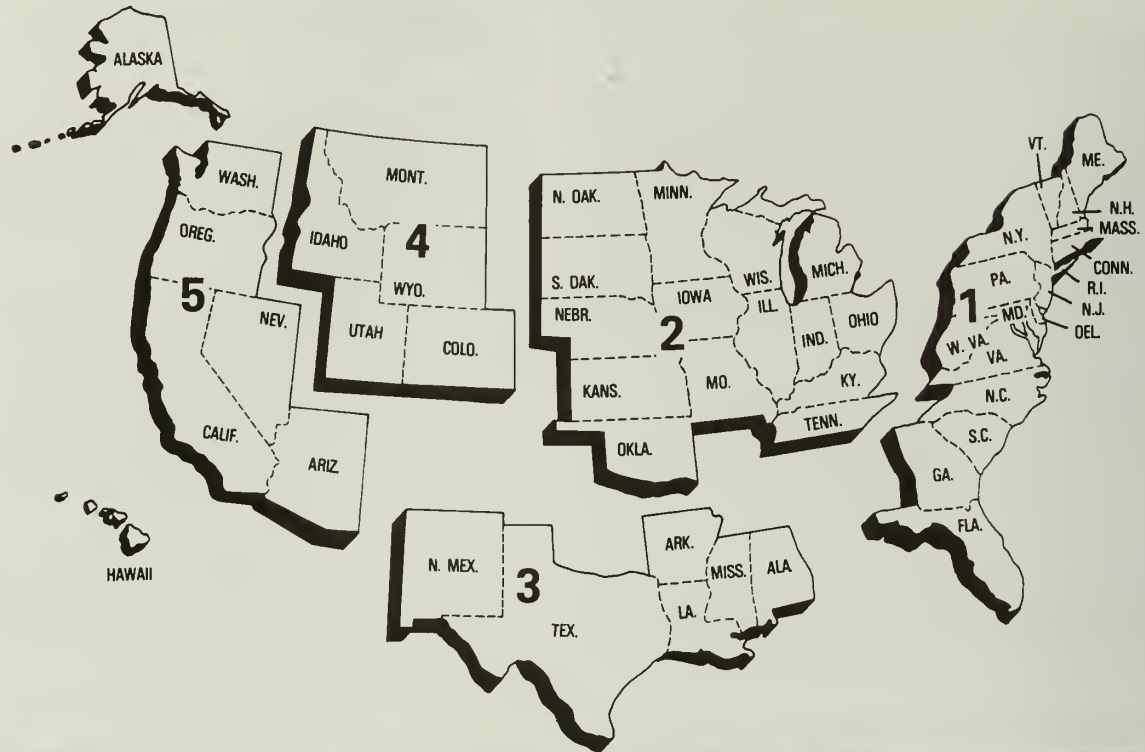
PAD District IV

Rocky Mountain: The States of Montana, Idaho, Wyoming, Utah, and Colorado.

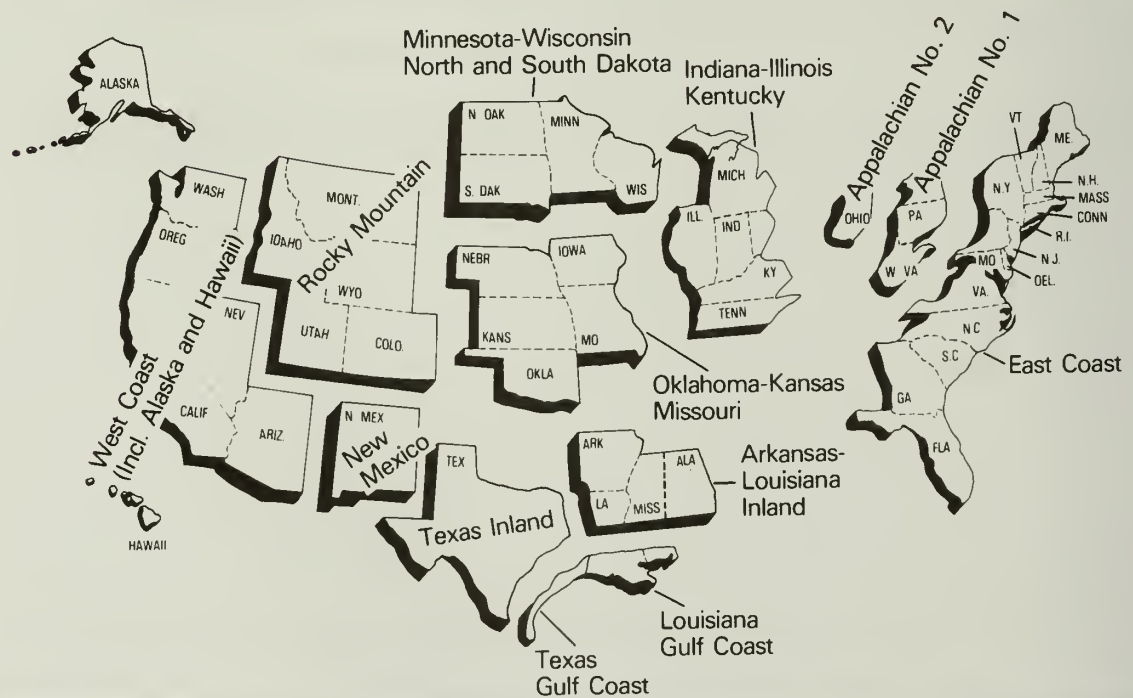
PAD District V

West Coast: The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

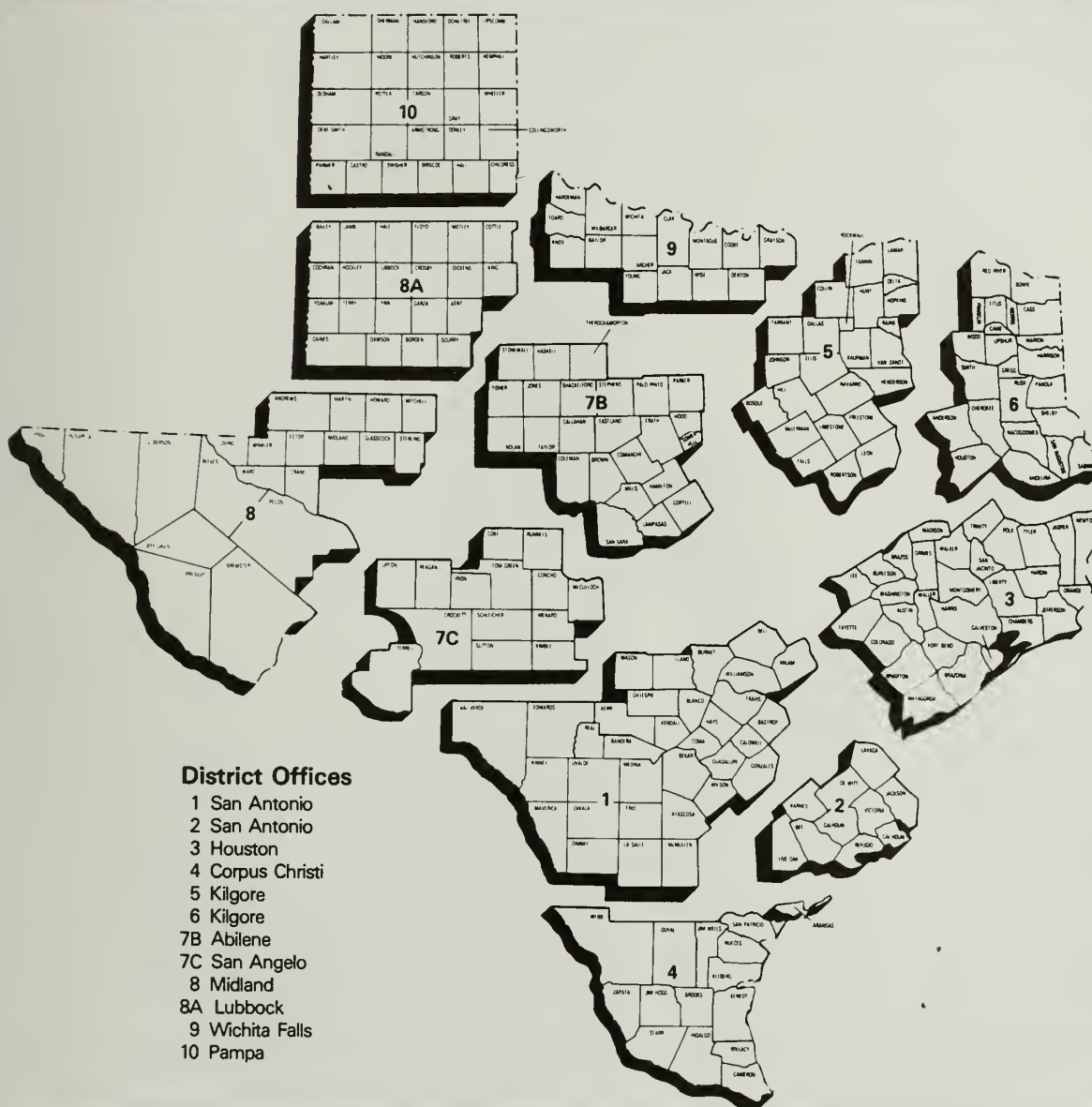
Petroleum Administration for Defense (PAD) Districts

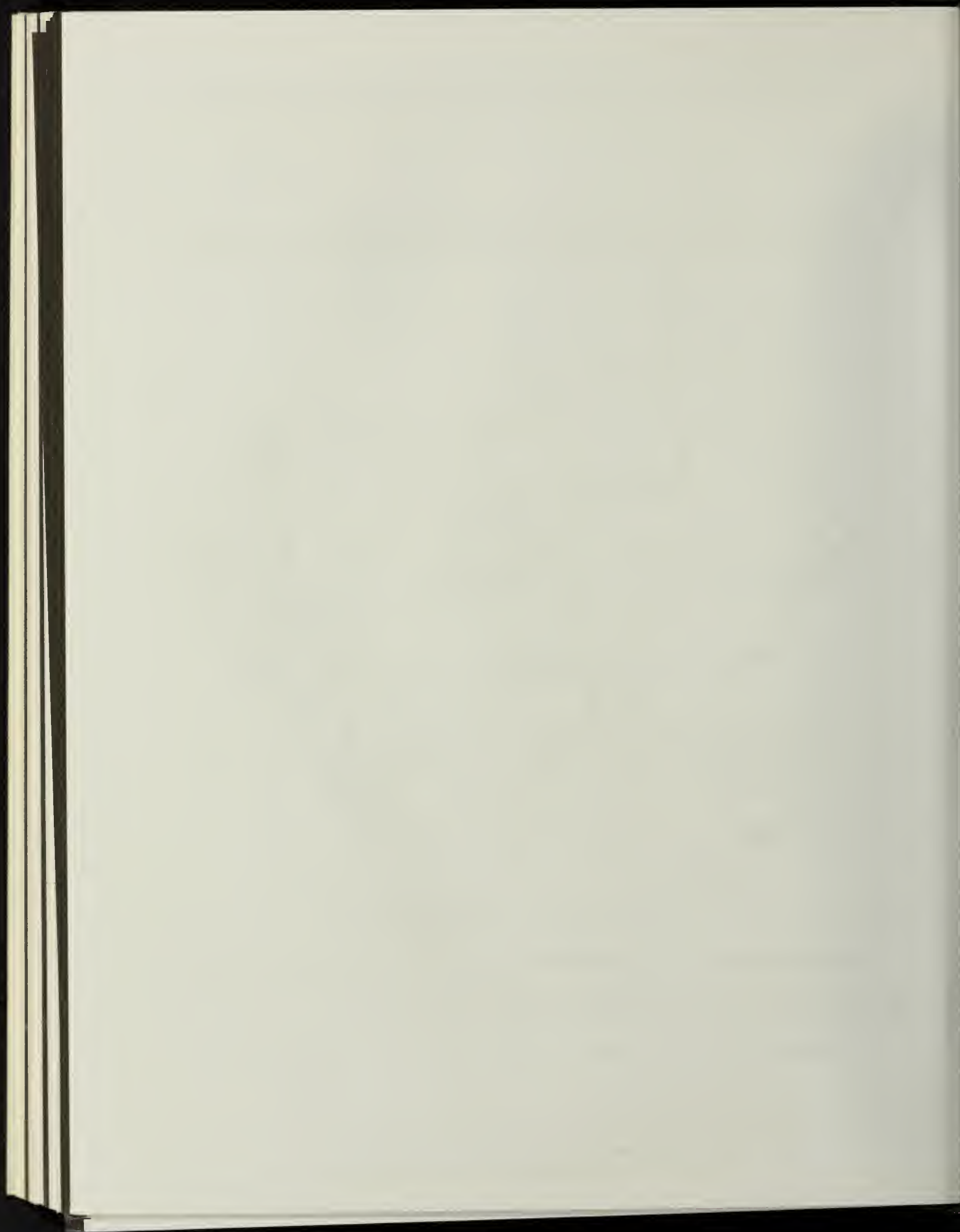


Bureau of Mines Refining Districts



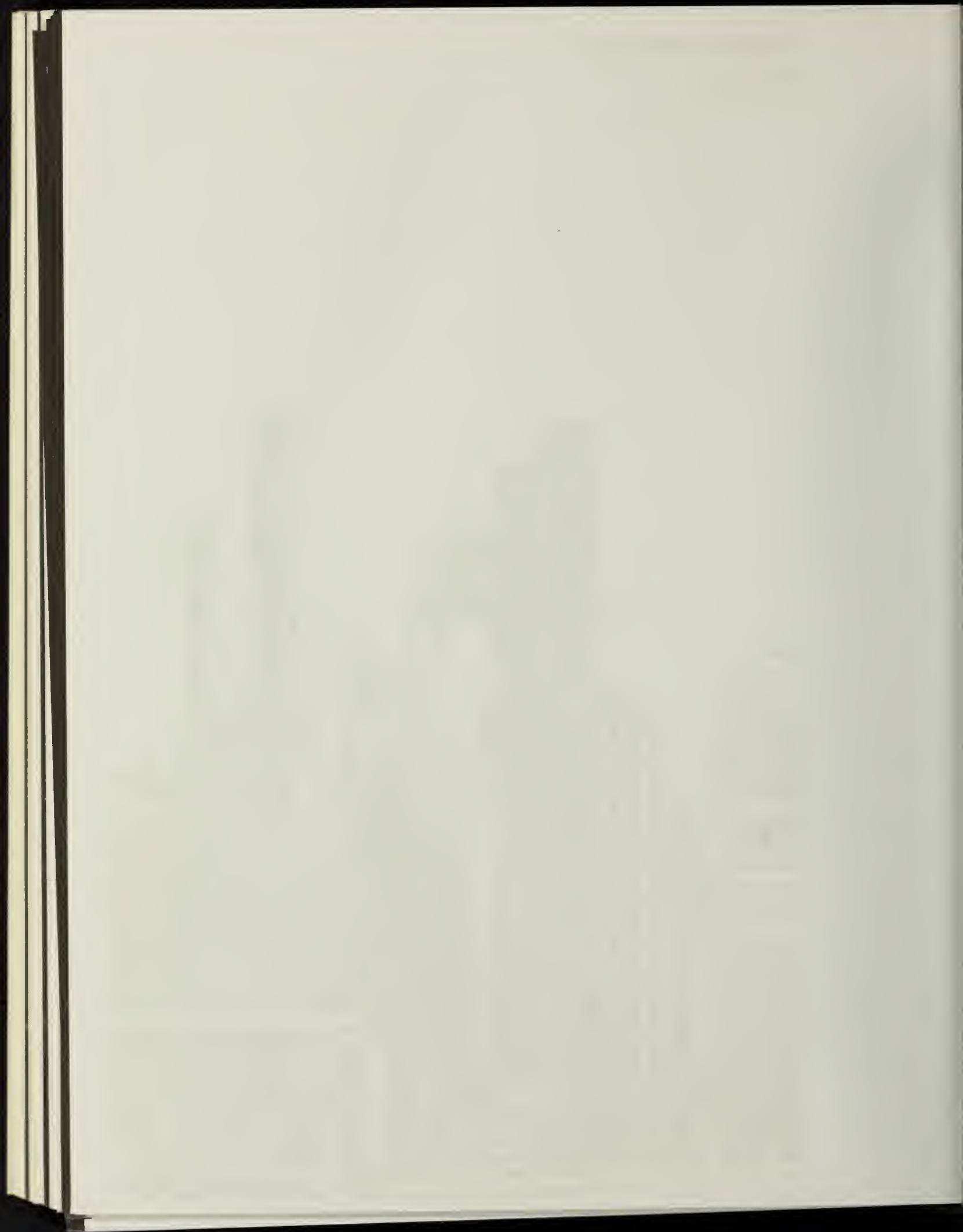
District Map Oil and Gas Division Railroad Commission of Texas





Explanatory Notes





Note 1: Data Collection Methodology

Background

Beginning in January 1983, the Energy Information Administration (EIA) unified its petroleum supply data collection activities into the Petroleum Supply Reporting System (PSRS). The PSRS represents a family of data collection survey forms, data processing systems and publication systems that have been consolidated to achieve comparability and consistency throughout. The primary focus of the consolidation has been to revise the weekly and monthly survey reporting forms to assure consistency in form layout, preparation instructions, and definitions. As a result, a new set of survey forms were implemented in January 1983. The following are the new form numbers and their corresponding predecessor forms:

New Form Number	Name	Old Form Number
EIA-800	Weekly Refinery Report	EIA-161
EIA-801	Weekly Bulk Terminal Report	EIA-162
EIA-802	Weekly Product Pipeline Report	EIA-163
EIA-803	Weekly Crude Oil Stocks Report	EIA-164
EIA-804	Weekly Imports Report	EIA-165
EIA-805	Weekly Shipments from Puerto Rico to the United States Report	—
EIA-810	Monthly Refinery Report	EIA-87
EIA-811	Monthly Bulk Terminal Report	EIA-88
EIA-812	Monthly Product Pipeline Report	EIA-89
EIA-813	Monthly Crude Oil Report	EIA-90
ERA-60	Monthly Imports Report	ERA-60
EIA-815	Monthly Shipments from Puerto Rico to the United States Report	FEA-P133-M-0
EIA-816	Monthly Natural Gas Liquids Report	EIA-64
EIA-817	Monthly Tanker and Barge Movement Report	EIA-170

Forms EIA-800 through 805 comprise the Weekly Petroleum Supply Reporting System (WPSRS). This system is designed to collect basic refinery operations and product stock data for major products on a weekly basis. Data from the WPSRS are published in the *Weekly Petroleum Status Report (WPSR)* and are also used to calculate the preliminary statistics in the "Summary Statistics" section of the *Petroleum Supply Monthly*

(PSM). A description of the WPSRS survey forms follows in Note 1.1.

Forms EIA-810-813, 815-817 and ERA-60 comprise the Monthly Petroleum Supply Reporting System (MPSRS). These surveys collect detailed refinery operations data, refinery, bulk terminal and pipeline stocks data, crude oil and petroleum product imports data and movements of petroleum products and crude oil between PAD Districts data. These surveys are the primary source of data for the "Summary Statistics" and "Detailed Statistics" sections of the PSM. A description of MPSRS survey forms follows in Note 1.2.

Data are also obtained in magnetic tape form from the Bureau of the Census on a monthly basis. These tapes contain aggregated import and export statistics that are used in the preparation of the PSM. A description of the Census data follows in Note 1.3.

Note 1.1: Weekly Petroleum Supply Reporting System (WPSRS)

Background

The EIA first began publishing weekly petroleum supply statistics in April 1979 in response to the Iranian oil crisis. Initially, the published data were taken from the American Petroleum Institute (API) *Weekly Statistical Bulletin*. However, in January 1980 the EIA began to publish weekly statistics from its own surveys, with the exception of imports statistics which the EIA did not begin collecting until June 1980.

The weekly surveys collect data comparable to those collected on a monthly basis. Selected petroleum companies report weekly data to the EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804, the importer of record reports each shipment entering the United States. On Form EIA-805, a company shipping unfinished oils and finished petroleum products into the United States from Puerto Rico reports each shipment. Current weekly data and the most recent monthly data are used to estimate the totals that are published in the *Weekly Petroleum Status Report*.

Sample Frame

The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Sampled companies report data only for facilities in the 50 States and District of Columbia.

The sample for each survey is taken from the following universe:

EIA-800: Based on the EIA-810 universe, which includes all petroleum refineries in the United States and

its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and plants that produce finished motor gasoline through mechanical blending. The selected sample size is 215.

EIA-801: Based on the EIA-811 universe, which includes all bulk terminal facilities in the United States and its territories that have either a total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline. The selected sample size is 93.

EIA-802: Based on the EIA-812 universe, which includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including interstate, intrastate and intracompany pipeline movements. Pipeline companies that transport only natural gas liquids are not included in the EIA-802 frame. Only those pipeline companies that transport products covered in the weekly survey are included. The selected sample size is 65.

EIA-803: Based on the EIA-813 universe, which consists of crude oil pipeline companies (gathering and trunk pipeline companies) in the United States and its territories, all refining companies, all crude oil producers, all terminal operators, all companies transporting Alaskan Crude Oil by water, and all storers of 1,000 barrels or more of crude oil. The selected sample size is 85.

EIA-804: Based on the ERA-60 universe, which includes all importers of record of crude oil and petroleum products into the United States and Puerto Rico. The selected sample size is 65.

EIA-805: Based on the EIA-815 universe, which includes all shippers of unfinished oils and petroleum products into the United States from Puerto Rico. Four companies report.

Sampling Method

The cut-off method is the sampling procedure used for all weekly surveys except the EIA-802, which uses the monthly universe in its entirety. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous 12-month period. Companies are chosen for the sampling, beginning with the largest and adding companies until the total sample covers 90 percent of the total for the previous time period for each product published in the *Weekly Petroleum Status Report*.

Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. The report period closes each Friday at 7 a.m. All canvassed firms and terminal operations companies must file by 5 p.m. on the following Monday.

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Estimation and Imputation

After company reports have been checked and entered into the weekly data base, weekly totals for given products are estimated by using the following formula.

The total reported by all companies for the most recent month (M_t) is divided by the amount reported by the sample of companies for the most recent month (M_s). The result is multiplied by the amount reported by the sample of companies for the current week (W_s). The answer, W_t , is an estimate of the amount that would have been reported by all companies for the current week if all companies reported each week.

$$W_t = \frac{M_t}{M_s} (W_s)$$

This procedure is used to estimate total weekly inputs to refineries and production.

To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Therefore, an exponentially smoothed ratio has been developed. The estimate of weekly imports is the sum of the smoothed ratio multiplied by the weekly values and estimates for shipments from Puerto Rico. Imports of other oils includes an adjustment from Census data for unlicensed products because of coverage differences between the monthly imports data and Census data.

Explicit imputation is done for companies which do not respond in a given week. The imputed values are exponentially smoothed means of recent reports from the specific company.

Response Rates

The response rate for the published estimates is usually between 95 and 98 percent.

Note 1.2: Monthly Petroleum Supply Reporting System (MPSRS)

Background

The MPSRS was implemented in January 1983 as the result of an extensive effort to integrate the collection and processing of petroleum supply data that have been collected on other survey forms for many years. The collection of monthly petroleum supply statistics began as early as 1918 when the Bureau of Mines (BOM) began collecting data on refinery operations and crude oil stocks and movements. The collection systems

were further expanded to include natural gas plant liquids production and storage in 1925, imports of crude oil and petroleum products and storage and movements of petroleum products in 1959, and tanker and barge movements of crude oil and petroleum products in 1964. Since their inception, each survey has undergone numerous changes, but the MPSRS is the first effort to make them all consistent and comparable.

Respondent Frame

EIA-810: All petroleum refineries and plants that produce finished motor gasoline through the mechanical blending of liquids which are operated or controlled in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, the Hawaiian Foreign Trade Zone, and Guam. Approximately 313 respondents report on the EIA-810.

EIA-811: All bulk terminal facilities in the 50 States and the District of Columbia, Puerto Rico, and the Virgin Islands that (a) have a total bulk storage capacity of 50,000 barrels or more and/or (b) receive petroleum products by tanker, barge, or pipeline, regardless of ownership of the material. Approximately 328 respondents report on the EIA-811.

EIA-812: All products pipeline companies that carry petroleum products (including interstate, intrastate and intracompany pipelines) in the 50 States and the District of Columbia. Approximately 94 respondents report on the EIA-812.

EIA-813: All crude oil pipeline companies (gathering and trunk pipeline companies), crude oil producers, companies transporting Alaskan crude oil by water (in excess of 1,000 barrels), and all storers of crude oil, regardless of ownership, in the 50 States and the District of Columbia. Approximately 180 respondents report on the EIA-813.

EIA-815: All licensed importers and importers of record shipping petroleum products from Puerto Rico into the 50 States and the District of Columbia.

Import data from the ERA-60 and EIA-815 are integrated into the import statistics reported in the PSM.

EIA-816: All operators of facilities designed to extract liquid hydrocarbons from natural gas stream (natural gas processing plants) or to separate a hydrocarbon stream into its component products, i.e., propane, butane, natural gasoline, etc. (fractionators). Approximately 990 respondents report on the EIA-816.

EIA-817: All known companies and plants that have custody of crude oil and petroleum products transported by tanker and barge between PAD Districts or between PAD Districts and the Panama Canal. There are about 50 respondents.

ERA-60: All licensed importers and importers of record importing crude oil and petroleum products into the

United States and Puerto Rico. The respondent universe consisted of approximately 1,100 firms as of July 31, 1982. However, only a selected 250 importers must report each month regardless of import activity. All others must report only for a month in which they actually had imports. The respondent universe for this survey is updated whenever an import license is granted by the Office of Oil Imports of the ERA.

EIA utilizes a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review industry publications such as the *Oil and Gas Journal* and *LP Gas Almanac* for information on facilities or companies going into operation or closing down. These are augmented by articles in newspapers, letters from respondents indicating changes in status and information received from survey systems operated by other offices.

Every two to three years an extensive survey study is conducted to completely refresh the frames. This involves consolidating information from every known source including State agencies, federal agencies (e.g., EPA, Corps of Engineers, Census Bureau, etc.), and private industry directories. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

Collection Methods

The data for all of the MPSRS surveys are collected monthly. Completed forms are required to be postmarked by the 20th day following the end of the report month, with the exception of the EIA-815 and ERA-60 which are due 15 work days following the end of the report month. Telephone follow-up calls are made to nonrespondents prior to the publication deadline, for their data. An automated mailing list is maintained and is used to monitor receipt of the forms.

Imputing Missing Data

Imputation is performed only for nonresponding companies that submitted reports the previous month. For such companies, previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. In the event that the previous month's data were estimated, the respondent is contacted and requested to submit estimates, if necessary, to be followed by submission of actual data. Data for nonrespondents on the EIA-815 and 817, and ERA-60 are not imputed.

Response Rates

As of the filing deadline, the response rates of the EIA-810 through EIA-813 respondents is over 90 per-

cent. The response rate for the EIA-816 is over 85 percent and for the EIA-817 it is 98 percent. All companies that have not responded are contacted by telephone. Although data are taken by telephone to expedite processing, a certified submission is still required. Names of companies that fail to file for 2 consecutive months are forwarded for further noncompliance action.

In July 1982, the ERA-60 survey had a response rate of 98 percent by the filing deadline. The universe was 1,100 firms at that time. (Because this is a dynamic survey, the universe is constantly changing.) Standard follow-up of nonrespondents is made to insure that all reports are received, since data are not imputed for nonrespondents. In addition, response is cross-checked with response on the Petroleum Licensing Decrementation System (PLDS), a listing of each month's importers. The response rate is generally 98 to 99 percent by the time the data are first published.

Note 1.3: Census Import (IM-145) and Export (EM-522 and EM-594) Data

Background

Each month the EIA purchases magnetic tapes of aggregated import and export statistics from the Bureau of the Census. These data provide the only source of export statistics and are used to augment the import data collected by the EIA. Export statistics and import data from the Census tapes on liquefied petroleum gases, bonded ships bunkers and military offshore use are published in the PSM.

Import Statistics (IM-145)

Coverage

The import statistics reflect both government and non-government imports of merchandise from foreign countries into the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico), without regard to whether or not a commercial transaction is involved. In general, the statistics record the physical movement of merchandise into the United States from foreign countries, with the exception of the following types of transactions that are excluded from the statistics:

1. Merchandise in-transit through the United States, when documented with Customs as an in-transit movement.
2. Shipments from anywhere to U.S. possessions and shipments from U.S. possessions to the United States. (U.S. possessions include Puerto Rico, the Virgin Islands, Guam, and American Samoa.)
3. U.S. merchandise that was held in foreign countries by the U.S. Armed Forces and is returned to the United States for the use of the Armed Forces.

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Source of Import Information

The official U.S. import statistics are compiled by the Bureau of the Census from copies of the import entry and warehouse withdrawal forms that importers are required by law to file with Customs officials (Customs Forms 7501, 7505, and 7506).

Imported petroleum is reported as *Imports for Consumption*. Imports for consumption are a combination of entries for immediate consumption and withdrawals from warehouses for consumption. With certain exceptions as indicated above, these data generally reflect the total of commodities entered into U.S. consumption channels.

Country and Area of Origin

The country reported in the statistics as the country of origin is defined as the country where the merchandise was grown, mined, or manufactured. In instances where the country of origin cannot be determined, the transactions are credited to the country of shipment.

Export Statistics (EM-522 and EM-594)

Coverage

The export statistics reflect both government and non-government exports of domestic and foreign merchandise from the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico) to foreign countries, without regard to whether or not the exportation involves a commercial transaction. In general, the statistics record the physical movement of merchandise out of the United States to foreign countries, with the exception of the following types of transactions:

1. All shipments from U.S. possessions, regardless of whether the shipments are sent to the United States, to other U.S. possessions, or to foreign countries.
2. Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.
3. Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

Source of Export Information

The official U.S. export statistics are compiled by the Bureau of the Census primarily from copies of Shipper's Export Declarations. Exporters are required to file Shipper's Export Declarations with Customs officials. The only exceptions are those exporters who have been authorized to submit data directly to the Bureau of Census on magnetic tape, punched cards, or monthly Shipper's Summary Export Declarations.

Country and Area of Destination

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

Note 2: Supply

The components of petroleum supply are field production, refinery production, imports, and stock withdrawal or addition:

Field Production is the sum of crude oil production (including lease condensate), natural gas processing plant production, and new supply (field production) of other liquids used by refineries.

Crude oil production is estimated based on data received from State conservation and revenue agencies. For further explanation, see Explanatory Note 3.

Field production of natural gas plant liquids (NGPL), including finished petroleum products, is reported monthly on survey Form EIA-816, *Monthly Natural Gas Liquids Report*. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. For survey description and other detail, see Explanatory Note 1.2.

Refinery Production of LRGs, ethane, and finished petroleum products is reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published production of these products equals refinery production minus refinery input. Refinery production of unfinished oils and of motor and aviation gasoline blending components appears on a net basis under refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. It should also be noted that refineries do not export production of crude oil, natural gasoline, isopentane, unfractionated stream, plant condensate, or other hydrocarbons.

Imports of crude oil and petroleum products are reported monthly on Form ERA-60, *Report of Oil Imports into the United States and Puerto Rico*, and Form EIA-815, *Shipments of Refined Products (Including Unfinished Oils) from Puerto Rico to the United States*. In addition, the Census Bureau Tabulation IM-145 summarizes import data from Customs import declarations reported on Customs Forms 7501 and 7505. The most prominent difference between the EIA and Census systems appears in imports of liquefied petroleum gases

(LPG), where the Census data show a much higher level of imports than EIA data. This occurs because the ERA-60 respondent frame was built by monitoring importers of licensed products and LPGs are not licensed products. Therefore, respondents that import only LPGs have not been identified, and do not report these imports to the Department of Energy. Since these importers are required to file form 7501 with the U.S. Customs Service, EIA obtains data on imports of LPGs from Census Tabulation IM-145. Additional data taken from the IM-145 are relatively small quantities of naphtha- and kerosene-type jet fuels, distillate fuel oils, and residual fuel oils withdrawn from bonded storage for use in international trade and for military offshore use. Even though these duty-free fuels are stored on United States shores, they did not enter the United States for domestic consumption and therefore are not included in the ERA-60 reporting system.

Stock Withdrawal (+) or Addition (-) is calculated by subtracting stocks at the end of the month from stocks at the beginning of the same month. (Note: The beginning stocks of one month are equal to the ending stocks of the previous month.) A positive result (+) would represent a withdrawal from stocks and an increase in petroleum supplies distributed for domestic consumption. A negative result (-) would represent a buildup of stocks and a reduction in the amount of petroleum supplies distributed for domestic consumption. For a description of survey forms used to make stock withdrawal or addition calculations see Explanatory Note 5.

Unaccounted-for Crude Oil is a balancing item that represents the difference between crude oil supply and disposition.

Crude oil supply is the sum of field production, imports and stock withdrawals or additions. Crude oil disposition is the sum of exports, refinery input, losses and product supplied. Unaccounted-for crude oil is calculated by subtracting crude oil supplies from crude oil disposition. A positive result indicates that refiners and exporters reported use of more crude oil than was reported to have been available to them. (This occurs, for example, when imports are undercounted due to late reporting or other problems.) A negative result would indicate that more crude oil was reported to have been supplied to refiners and exporters than they reported used.

Note 3: Domestic Crude Oil Production

Data for the Crude Oil Production System (COPS) are reported to the Department of Energy by each of the State conservation agencies, which collect crude oil production values for tax purposes. The U.S. Geological Survey reports the volume of crude oil that is produced offshore in Federally-owned waters. With the exception of ten State conservation agencies, all of these reports are received monthly. After each calendar year, these monthly numbers are updated using the annual reports

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from the State conservation agencies and the U.S. Geological Survey. The ten States that do not report monthly values are Indiana, Kentucky, Missouri, Arkansas, Utah, New York, Ohio, Pennsylvania, West Virginia, and Wyoming. Monthly values are estimated for these States using the individual linear trends of their historical annual crude oil production values.

There is a time lag of approximately 4 months between the end of the reporting month and the time when the monthly COPS information becomes available. Table 11 of this publication provides information on crude oil production for the most recent month for which COPS values are available. In order to present more timely crude oil production values, the EIA's Dallas Field Office prepares a series of State level estimates which are based on historical production patterns and are summed to obtain the monthly crude oil production values shown in the summary statistics of this publication.

The individual State level estimates are either exponential curve fitted projections based on recent data or are constant level projections based on the average production rate during a recent time period. In some cases, adjustments are made to these estimates based on additional information on expected changes in production rates supplied by a State agency, a trade association, or an individual field operator.

Note 4: Disposition

The components of petroleum disposition are crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

Crude Oil Losses is the sum of crude oil losses at refineries. Crude oil losses at refineries are reported on Form EIA-810, *Refinery Report*.

Refinery inputs of crude oil, natural gas plant liquids, and other liquids are reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published inputs of unfinished oils and of motor and aviation gasoline blending components equal refinery input minus refinery output. Refinery inputs of finished petroleum products are reported on a net basis under refinery production.

Exports of crude oil and petroleum products are compiled from Census Bureau tabulations EM-522 and EM-594. Exports include crude oil shipments to Puerto Rico, the Virgin Islands, and the Hawaiian Foreign Trade Zone, which are obtained from refinery receipts reported on Form EIA-810, by refineries located in these places.

Product supplied for each product is calculated by summing field production plus refinery production, plus imports, plus stock withdrawal or minus stock addition, minus crude oil losses (plus net receipts when calculated on a PAD District basis), minus re-

finery input, minus exports. This formula ensures that total disposition equals total supply.

Products supplied indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of that product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported, (2) data were misreported or reported late, (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of interdistrict movements was incomplete.

Product supplied for crude oil is the sum of crude oil burned on leases and by pipelines as fuel oil. These data are reported on EIA-813, *Monthly Crude Oil Report*. Prior to January 1983, crude oil burned on leases and by pipelines as fuel oil were reported as either distillate or residual fuel oil and included in product supplied for these products.

Note 5: Stocks

Primary stocks of crude oil are the sum of ending stocks reported monthly on Form EIA-810, *Monthly Refinery Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Crude oil held in the Strategic Petroleum Reserve is included unless otherwise noted. Alaskan crude oil in transit is also included. Stocks of crude oil are also reported weekly on Form EIA-800, *Weekly Refinery Report*, and on Form EIA-803, *Weekly Crude Oil Stocks Report*. Primary stocks of petroleum products are summed from data reported on Form EIA-816, *Monthly Natural Gas Liquids Report*, Form EIA-811, *Monthly Bulk Terminal Report*, and on Form EIA-812, *Monthly Product Pipeline Report*. Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or stocks held by consumers. Petroleum product stocks are also reported weekly on Form EIA-800, *Weekly Refinery Report*, Form EIA-801, *Weekly Bulk Terminal Report*, and Form EIA-802, *Weekly Crude Oil Stocks Report*. For survey descriptions and other details, see Explanatory Notes 1.1 - 1.3.

Note 6: Average Stock Levels

The graphs displaying monthly stock levels of crude oil, motor gasoline, distillate fuel oil, residual fuel oil, liquefied petroleum gases, and other products provide the user with recent data as well as a summary of data from January through December or from July through June for the most recent 3-year period. This summary takes the form of an *average range* that includes seasonal variation determined from a longer time period. The

average range represents the historical pattern; it is not a forecast.

These curves are updated semiannually (on January 1 and July 1), by basing the *average ranges* on a more recent time period. Each 3-year data series is adjusted by dropping the first 6 months and including the most recent 6 months.

For each data series, the monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of the Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive. The series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported stock levels. The intent of deseasonalization is to remove only seasonal variation from the data. Thus, a deseasonalized series would contain the same trends and irregularities as the original data. For crude oil stocks, the derived seasonal factors are very small relative to crude oil stock levels. Therefore, the seasonal factors for distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products are derived using monthly data from 1974-1980. For motor gasoline, the seasonal factors are based on monthly data from 1975, 1976, 1978, 1979 and 1980. In 1977, there was virtually no seasonal behavior in motor gasoline stocks. Monthly stock levels stayed at the same high level for the entire year. In addition, the seasonal patterns in 1973, 1974 and 1977 were not representative of the recent past, and these years were not used in the determination of seasonal patterns for motor gasoline stocks. Because of these differences in the year-to-year seasonal fluctuation of motor gasoline, the evidence for the illustrated seasonal patterns for crude oil, distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products is stronger than is the evidence for the illustrated seasonal patterns for motor gasoline.

In some cases, these seasonal patterns do not show a smooth transition from month to month. For example, the June factor for residual fuel oil is slightly less than the May and July values, making a bump in the curve. As there is little difference in the magnitude of these seasonal factors, it is possible that this variation is due to the small number of observations (7 years) and the data variability.

After seasonal factors are derived, the most recent 3-year period (from January through December or from July through June) is deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard error of the deseasonalized 36 months is calculated adjusting for extreme data points. The width of the *average range* is twice this standard error.

The upper curve of the *average range* is defined as the average plus the seasonal factors plus the standard error. The lower curve is defined as the average plus the seasonal factors minus the standard error.

Note 7: Movements

Movements of crude oil between PAD Districts are reported on Form EIA-817, *Monthly Tanker and Barge Movement Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Petroleum product movements are reported on Forms EIA-817 and EIA-812, *Monthly Product Pipeline Report*. Net receipts is the difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge. For survey descriptions and other detail, see Explanatory Note 1.2.

Note 8: Preliminary Monthly Statistics

Weekly data (Forms EIA-800, 801, 802, 803, and 804) are used to estimate the most recent monthly values for the *Summary Statistics* section. Since some of the weekly reporting periods overlap two adjacent months, it is necessary to use weighting factors in the calculation of the monthly values.

To estimate crude oil and petroleum product imports, crude oil input to refineries and production of petroleum products for a specific month, the weekly estimates are weighted by the number of days of that month included in each week, then summed.

End-of-month stock levels of crude oil and the major products (motor gasoline, distillate fuel oil, and residual fuel oil) are calculated in a similar manner, but use only the two weekly reporting periods that cover the end-of-week stocks before and after the end of the month. The end-of-month stock level is calculated by first calculating the stock change between the two weeks. The daily stock change between the two end-of-week stock levels is then calculated. This number is multiplied by the weighting factor of the earlier of the two weeks (the week that covers the last day of the month of interest). This change is added to the earlier of the two end-of-week stock levels to estimate the end-of-month stock level.

Preliminary monthly estimates of domestic crude oil production are calculated as described in Explanatory Note 3.

Note 9: Notes on Tables

Note 9.1 Crude Oil and Petroleum Products Overview statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Crude Oil and Petroleum Products Stock Withdrawal (+) or Addition (-), Petroleum Products Supplied, Total Imports, Crude Oil Imports, Total Exports, and Crude Oil Exports appear as labeled in Table 4. Total Production and Crude Oil Production appear under Field Production in Table 4.

- Natural Gas Plant Production is the sum of Natural Gas Liquids and Finished Petroleum Products Field Production in Table 4.

- Petroleum Products Imports is the sum of Natural Gas Liquids and LRGs, Other Liquids, and Finished Petroleum Products Imports in Table 4.

- Total Crude Oil and Petroleum Products Ending Stocks appear in thousands of barrels in Table 2.

Note 9.2 Crude Oil Supply and Disposition statistics on the referenced line appear in Table 1 of the Detailed Statistics, except where noted.

- Total Domestic Field Production, Alaskan Field Production, SPR Imports, Other Imports (synonymous with Imports Gross Excl. SPR), SPR and Other Primary Stocks Withdrawal (+) or Addition (-), Unaccounted For Crude Oil, Refinery Inputs, and Exports appear as labeled in Table 1.

- Crude losses and Product Supplied appear as labeled in Table 2.

- SPR Ending Stocks and Other Primary Ending Stocks (synonymous with stocks excluding SPR) appear in thousands of barrels in Table 1.

- Total Crude Oil Ending Stocks appear in thousands of barrels in Table 2.

- Total Imports appear in Table 4.

Note 9.3 Finished Motor Gasoline Supply and Disposition statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Unleaded Percent of Total Product Supplied represents the ratio of finished unleaded motor gasoline product supplied to total finished motor gasoline product supplied, multiplied by 100 and rounded to the nearest tenth.

- Ending Stocks appear in thousands of barrels in Table 2.

Note 9.4 Distillate and Residual Fuel Oil Supply and Disposition statistics on the referenced lines appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Ending Stocks appear in thousands of barrels in Table 2.

Note 9.5 Liquefied Petroleum Gases Supply and Disposition statistics represent the aggregation of statistics on ethane, propane, butane, butane-propane mixtures, ethane-propane mixtures, and isobutane. The statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stocks Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied appear as labeled in Table 4.

- Ending stocks appear in thousands of barrels in Table 2.

Note 9.6 Other Petroleum Products Supply and Disposition statistics represent the aggregation of statistics on natural gasoline, isopentane, unfractionated stream, plant condensate, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, and residual fuel oil. The statistics on the referenced line are aggregated from Table 4 of the Detailed Statistics, except where noted.

- Total Production is the aggregated sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied are aggregated from Table 4.

- Ending stocks are aggregated from ending stocks in thousands of barrels in Table 2.

Note 9.7 Table 1. U.S. Petroleum Balance

- Lines (1) through (3): Crude oil (including lease condensate) production for *Alaska*, *Lower 48 States*, and *Total U.S.* are calculated by calling the conservation agency in Alaska for Alaskan crude oil production during the month, estimating crude oil production in the United States (see Explanatory Note 3), and taking the difference to equal production in the Lower 48 States.

- Line (5): *SPR Imports* are reported on Survey Form ERA-60.

- Line (12): *Total Other Sources* equals crude oil stock withdrawal (+) or addition (-) plus unaccounted for crude oil minus crude losses in Table 2.

- Line (14): Natural gas plant liquids (NGPL) *Production* equals field production of natural gas liquids (NGL) plus field production of finished petroleum products in Table 2.

- Line (15): *NGPL Imports* equals the sum of the im-

ports of natural gasoline and isopentane, unfractionated stream, and plant condensate imports in Table 2.

- Line (16): *NGPL Stock Withdrawal (+) or Addition (-)* is equal to the sum of stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate in Table 2.

- Line (17) equals the sum of lines (14), (15), and (16).

- Line (18): Unfinished oils and gasoline blending components *Stock Withdrawal (+) or Addition (-)* equals stock withdrawal (+) or addition (-) for other hydrocarbons and alcohol, for unfinished oils, motor gasoline blending components, and aviation gasoline blending components.

- Line (20): *Other Hydrocarbons and Alcohol New Supply* equals the field production of same in Table 2.

- Line (21): *Refinery Processing Gain* is a balancing item equal to total refinery production minus total refinery input in Table 2.

- Line (23): *Total Other Liquids* equals the sum of lines (18) through (22).

- Line (24): *Total Production of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; plus crude oil product supplied in Table 2.

- Line (25): *Gross Imports of Refined Products* equals imports of LPG plus imports of finished petroleum products in Table 2.

- Line (26): *Exports of Refined Products* equals exports of LPG plus exports of finished petroleum products in Table 2.

- Line (27): *Net Imports of Refined Products* equals the difference between lines (25) and (26).

- Line (28): *Total New Supply of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; minus crude oil product supplied plus imports of LPG and finished petroleum products; minus exports of LPG and finished petroleum products in Table 2.

- Line (29): *Refined Products Stocks Withdrawal (+) or Addition (-)* equals the sum of stock withdrawal (+) or addition (-) for LPG and finished petroleum products in Table 2.

- Line (30): *Total Petroleum Products Supplied for Domestic Use* equals total products supplied in Table 2.

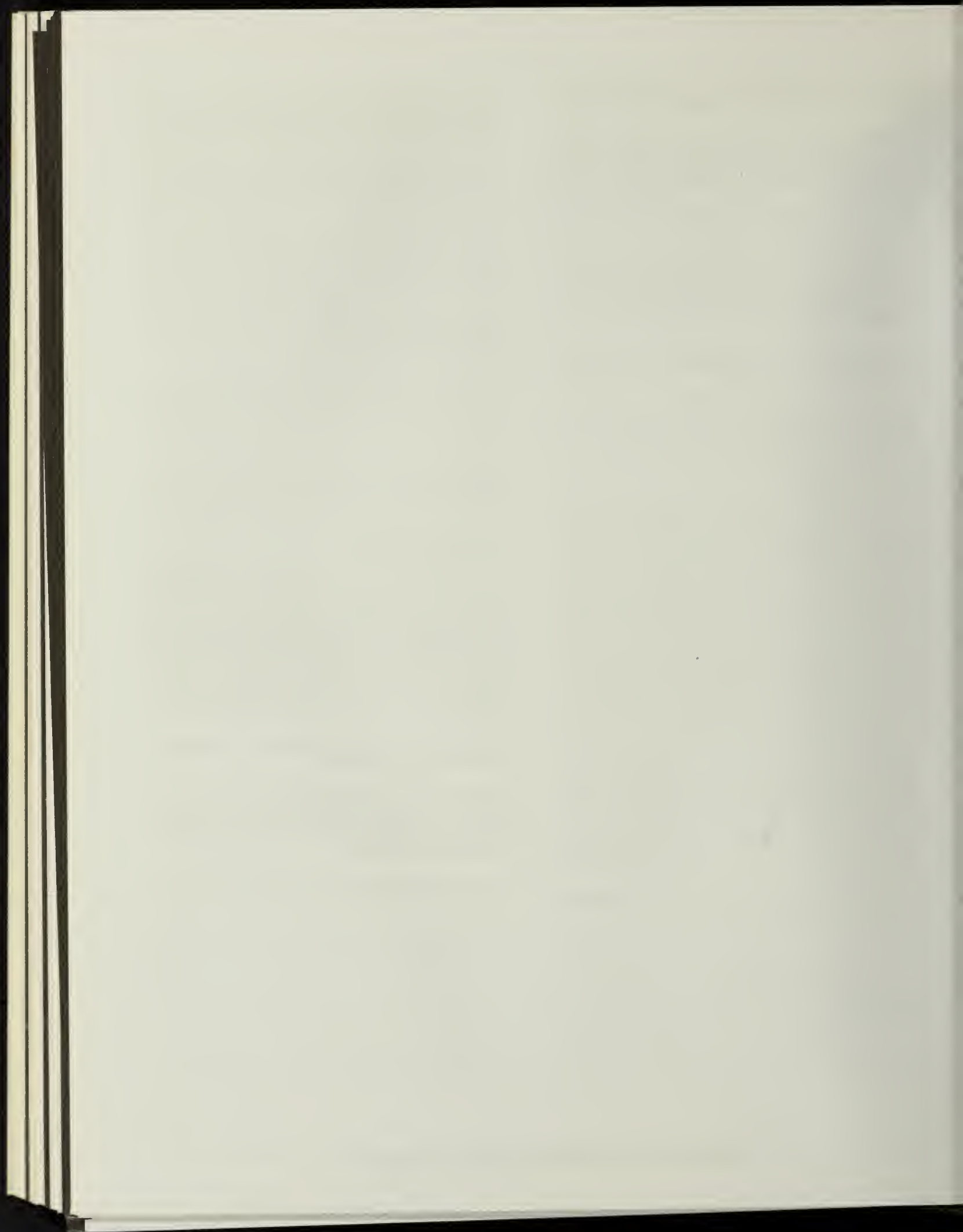
- Lines (31) through (35) equal the respective products supplied in Table 2.

- Line (36): *Other Products Supplied* equals the sum of natural gasoline and isopentane, unfractionated stream, plant condensate, aviation gasoline, naphtha < 400 Deg. F for petrochemical feedstock use, other oils > 400 Deg. F. for petrochemical feedstock use, special naphthas, lubricants, waxes, coke, asphalt, road oil, still gas, unfinished oils, motor gasoline blending components, aviation gasoline blending components and miscellaneous products supplied in Table 2.

- Line (37): *Total Product Supplied* is equal to total products supplied in Table 2.

- The sum of lines (38) and (39), stocks of *Crude Oil and Lease Condensate (Excluding SPR)* and stocks held by the *Strategic Petroleum Reserve*, equals ending stocks of crude oil in Table 2. SPR stocks are reported on Form EIA-813.

- Line (43): stocks of *Refined Products*, equals the sum of LPG and finished petroleum product stocks in Table 2.



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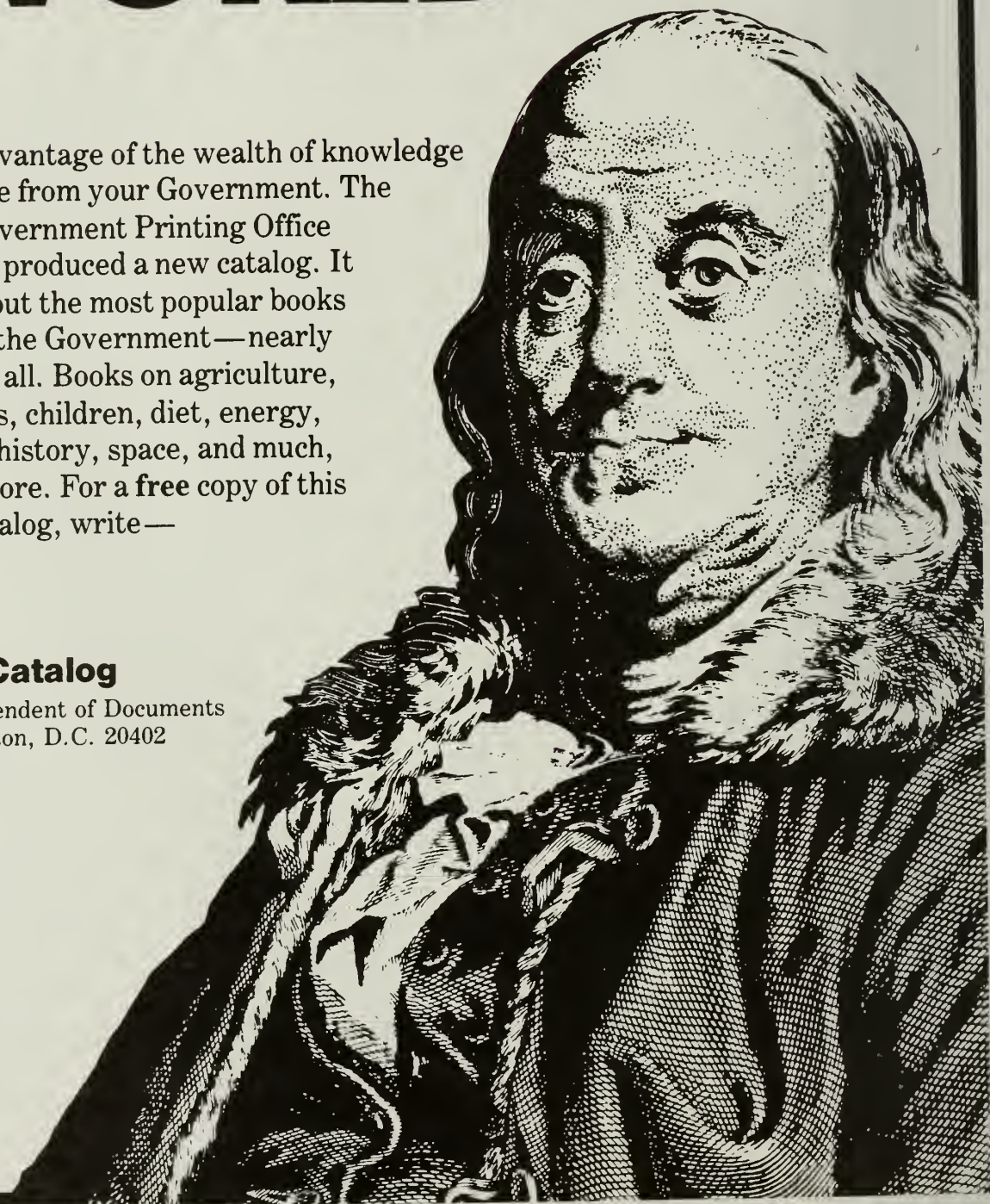
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Petroleum Supply Monthly



April 1983



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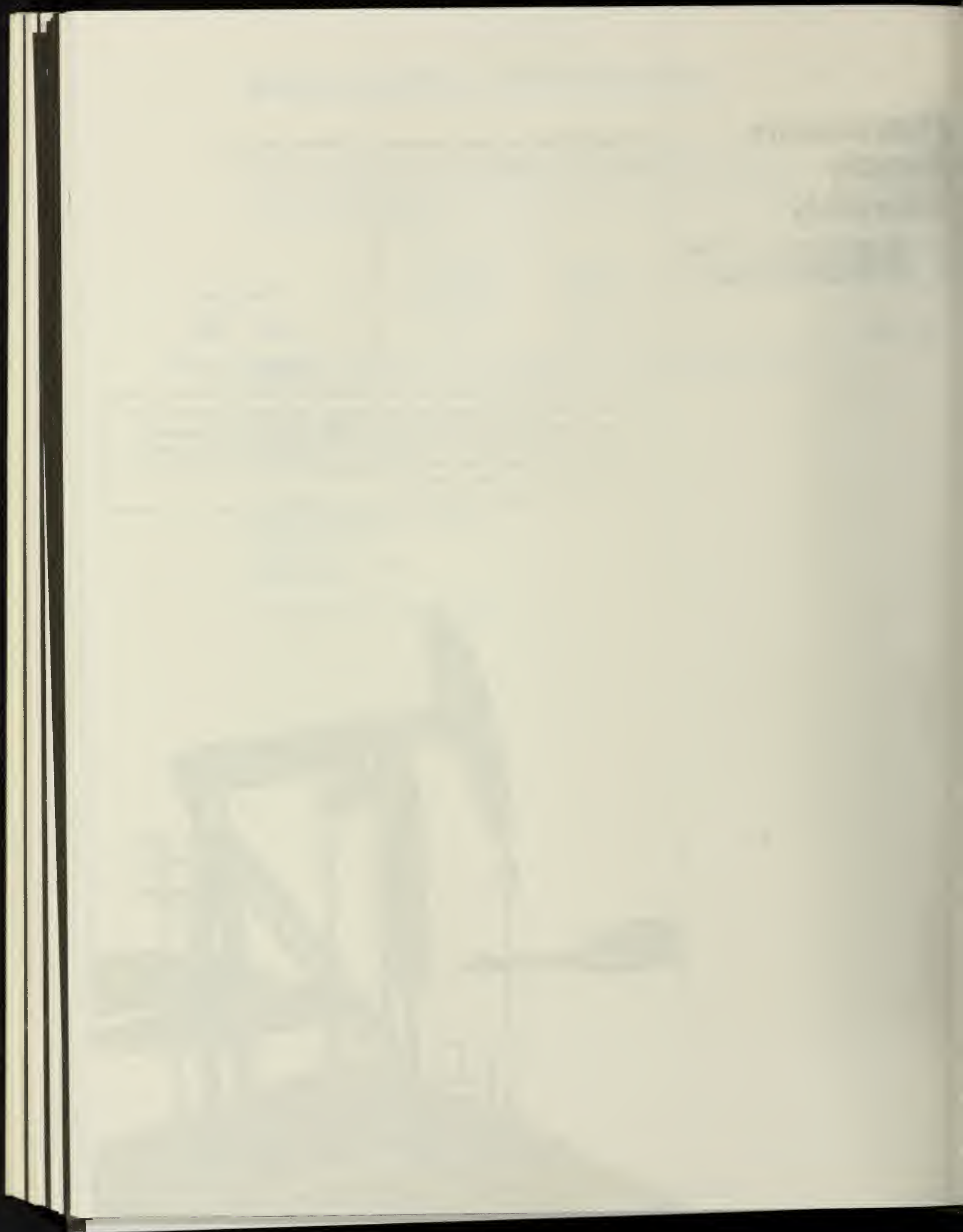
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April 1983



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Introduction

Changes in the Petroleum Supply Monthly

Beginning with the March 1983 issue, the *Petroleum Supply Monthly* (PSM) has been changed to incorporate revisions to the survey data collected for this report. These data collection forms, making up the Petroleum Supply Reporting System (PSRS), were revised and consolidated in order to reduce respondent burden and to improve consistency among the various EIA data collection instruments.

The detailed tables have been simplified due to the reduction in product and geographic detail collected in the survey process. The following are the most significant changes to the tables:

- Gasohol has been eliminated as a line item from all tables. Gasohol is now included with finished leaded or unleaded gasoline.
- The production, stock level, and movements of distillate fuel oil are no longer reported in disaggregate as Distillate, less No. 4 Fuel Oil and No. 4 Fuel Oil. They are now combined under the single category, Distillate Fuel Oil.
- Table 20 (formerly Table 24), *Stocks of Crude Oil and Petroleum Products* no longer contains refinery district breakdowns for pipelines and bulk terminals.
- Table 18, *Refinery Receipts of Crude Oil* and Table 19, *Fuels Consumed at Refineries by PAD District* have been eliminated on a monthly basis and will be published on an annual basis in the *Petroleum Supply Annual*.

- Tables 25, 26, 28 and 29 (formerly 29 through 32) reflect the elimination of No. 4 fuel oil as a separate category and the breakdown of sulfur content for residual fuel oil has been reduced from five to three categories.
- The requirement to report crude oil burned on leases and pipelines as either distillate or residual fuel oil has been eliminated. The consumption of crude oil as a fuel is now reflected in Tables 1 through 10 in "product supplied" of crude oil. This also applies to the historical section.
- Alcohol has been eliminated as a line item and is included with the product category, other hydrocarbons.
- Road oil and asphalt have been combined into a single category.
- Table 27, *Movements of Residual Fuel Oil by Tanker and Barge Between PAD Districts, by Sulfur Level*, has been added.
- Table 12, *Offshore Production of Crude Oil (Including Lease Condensate) by State* and Table 13, *Production of Lease Condensate By State*, have been eliminated. The information previously contained in Table 12 can now be found in footnote 1 of Table 11.

In addition to the changes in the tables listed above, the Explanatory Notes and Glossary have been revised to reflect the consolidated Petroleum Supply Reporting System.

Petroleum Focus



1890
1891



Petroleum Supply Summary

Average Volume for Period (Million Barrels Per Day)	March			Cumulative January Through March		
	1983	1982	% Change	1983	1982	% Change
Total Product Supplied	15.5	15.6	- 0.4	15.0	15.8	- 4.9
Motor Gasoline	6.7	6.6	0.6	6.2	6.2	0.3
Distillate Fuel Oil	2.7	2.9	- 6.1	2.8	3.2	- 12.5
Residual Fuel Oil	1.5	1.9	- 23.3	1.5	2.1	- 27.0
Crude Inputs to Refineries	10.9	11.3	- 3.0	10.9	11.4	- 4.4
Crude Oil and Natural Gas Liquids Production	10.3	10.2	0.9	10.3	10.2	0.7
Net Imports ¹	2.6	3.6	- 27.5	2.9	4.0	- 25.7
Net Crude Oil Imports ²	1.8	2.4	- 22.8	2.1	2.7	- 22.8
SPR Imports	0.2	0.2	- 6.5	0.2	0.2	14.0
Net Product Imports	0.6	1.0	- 42.0	0.7	1.1	- 39.1
Crude Oil Stock Withdrawal ²	0.41	0.17	—	- 0.04	0.03	—
Product Stock Withdrawal	1.79	1.05	—	1.27	1.15	—
Stocks at End of Period (Million Barrels)						
Crude Oil ²	353	366	NM			
Motor Gasoline ³	229	248	NM			
Distillate Fuel Oil	121	128	NM			
Residual Fuel Oil	44	57	NM			
Total Product	698	787	NM			
SPR	312	249	NM			
Total	1,363	1,401	NM			

¹Gross imports of crude oil including Strategic Petroleum Reserve (SPR) and petroleum products less exports of crude oil and petroleum products.

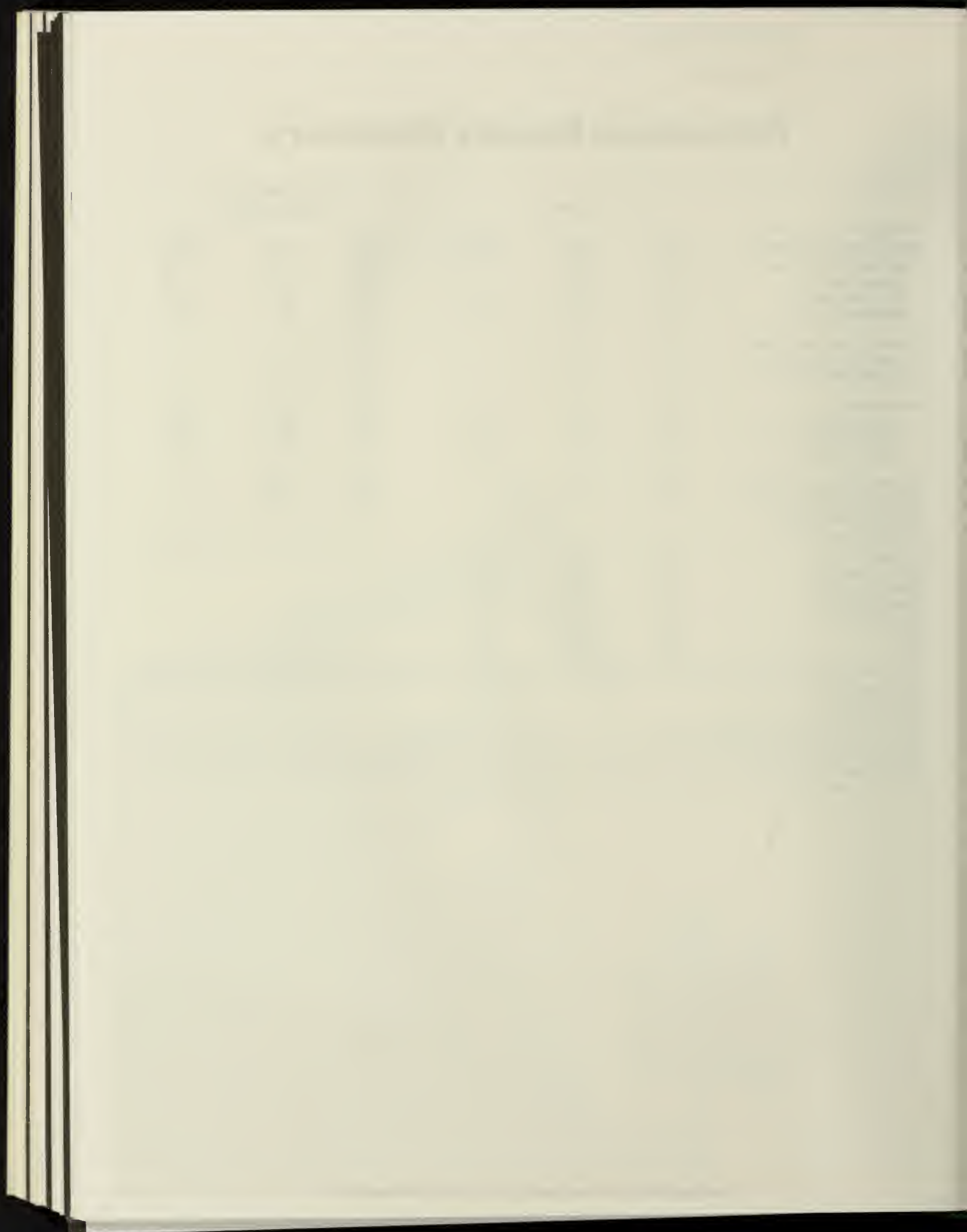
²Excluding SPR.

³Including blending components.

NM = Not meaningful due to new stock basis.

Note: Percent changes are based on unrounded values. March 1983 data are estimates based on weekly data, except for export and Natural Gas Liquids Production estimates which are February 1983 monthly values. Totals may not be equal to sum of components due to independent rounding.

Source: Energy Information Administration, *Petroleum Supply Monthly*, April 1983.



Summary Statistics



Crude Oil¹ and Petroleum Products Overview

		Field Production			Stock Withdrawal ²			Ending Stocks ³
		Total Domestic ⁴	Crude Oil	Natural Gas Plant Production	Crude Oil ⁵	Petroleum Products	Petroleum Products Supplied	Crude Oil ⁵ and Petroleum Products
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	10,975	9,208	1,738	11	-146	17,308	1,008
1974	AVERAGE	10,498	8,774	1,688	-62	-117	16,653	⁶ 1,074
1975	AVERAGE	10,045	8,375	1,633	-17	-145	16,322	1,133
1976	AVERAGE	9,774	8,132	1,603	-39	96	17,461	1,112
1977	AVERAGE	9,913	8,245	1,618	-170	-378	18,431	1,312
1978	AVERAGE	10,328	8,707	1,567	-78	172	18,847	1,278
1979	AVERAGE	10,179	8,552	1,584	-148	-25	18,513	1,341
1980	AVERAGE	10,214	8,597	1,573	-98	-42	17,056	⁶ 1,392
1981	January	10,231	8,540	1,652	50	1,159	18,430	1,388
	February	10,294	8,604	1,653	-278	250	16,989	1,389
	March	10,272	8,613	1,624	-632	224	15,907	1,401
	April	10,195	8,557	1,599	-595	148	15,350	1,415
	May	10,160	8,501	1,593	-391	-374	15,353	1,438
	June	10,287	8,629	1,594	-135	406	16,095	1,430
	July	10,098	8,500	1,548	-360	91	15,682	1,439
	August	10,243	8,583	1,614	397	-999	15,263	1,457
	September	10,281	8,604	1,612	-285	-341	15,655	1,476
	October	10,225	8,563	1,598	-760	477	15,822	1,485
	November	10,269	8,586	1,630	-325	-233	15,593	1,501
	December	10,220	8,585	1,590	-170	745	16,596	1,484
	AVERAGE	10,230	8,572	1,609	-290	130	16,058	
1982	January	10,257	8,669	1,548	-236	1,129	15,890	1,461
	February	10,261	8,690	1,524	-216	1,268	15,941	1,431
	March	10,212	8,597	1,570	-65	1,049	15,560	1,401
	April	10,296	8,652	1,588	107	1,594	16,048	1,350
	May	10,223	8,660	1,520	49	-34	14,845	1,349
	June	10,242	8,681	1,505	86	-515	14,931	1,362
	July	10,228	8,649	1,521	-155	-865	14,771	1,394
	August	10,301	8,701	1,543	-440	4	14,838	1,407
	September	10,306	8,733	1,513	252	-489	14,921	1,415
	October	10,283	8,676	1,540	-564	-55	14,820	1,434
	November	10,377	8,690	1,634	-357	-357	15,031	1,455
	December	10,348	8,660	1,638	143	703	15,508	⁶ 1,429
	AVERAGE	10,278	8,671	1,554	-117	280	15,253	
1983	January	10,356	8,634	1,668	-567	865	14,765	1,453
	February*	10,298	R 8,660	1,585	R -382	R 1,128	R 14,772	R 1,432
	March**	NA	8,677	NA	231	1,788	15,499	1,363
AVERAGE		NA	8,657	NA	-235	1,265	15,004	

¹ Includes lease condensate.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Ending stocks for 1973-1980 are totals as of December 31.

⁴ Includes crude oil, natural gas plant production, other hydrocarbons and alcohol.

⁵ Includes stocks located in the Strategic Petroleum Reserve.

⁶ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years.

The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage(new basis), end of year stocks would be: 1974-1,121, 1980-1,420 and 1982-1,462.

Stock withdrawals during 1975, 1981 and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.1.

** Italics denote preliminary data. See Explanatory Note 8.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil¹ and Petroleum Products Overview (continued)

		Imports			Exports				
		Total	Crude Oil ²	Petroleum Products	Total	Crude Oil	Petroleum Products		Net ³ Imports
Thousand Barrels per Day									
1973	AVERAGE	6,256	3,244	3,012	231	2	229	6,025	
1974	AVERAGE	6,112	3,477	2,635	221	3	218	5,892	
1975	AVERAGE	6,056	4,105	1,951	209	6	204	5,846	
1976	AVERAGE	7,313	5,287	2,026	223	8	215	7,090	
1977	AVERAGE	8,807	6,615	2,193	243	50	193	8,565	
1978	AVERAGE	8,363	6,356	2,008	362	158	204	8,002	
1979	AVERAGE	8,456	6,519	1,937	472	235	237	7,984	
1980	AVERAGE	6,909	5,263	1,646	544	287	258	6,365	
1981	January	6,827	4,932	1,895	558	339	219	6,270	
	February	6,772	4,873	1,899	569	198	371	6,203	
	March	6,028	4,521	1,507	586	210	376	5,442	
	April	5,668	4,338	1,330	570	198	372	5,098	
	May	5,775	4,287	1,489	595	312	283	5,180	
	June	5,435	4,061	1,375	420	123	297	5,015	
	July	5,816	4,296	1,521	571	257	314	5,245	
	August	5,767	4,179	1,588	644	204	440	5,123	
	September	6,365	4,740	1,624	519	194	325	5,845	
	October	5,959	4,380	1,579	738	226	512	5,221	
	November	5,741	4,046	1,695	701	278	423	5,041	
	December	5,843	4,137	1,706	656	189	467	5,187	
		AVERAGE	5,996	4,396	1,599	595	228	367	5,401
1982	January	5,232	3,648	1,585	829	238	591	4,404	
	February	4,691	2,949	1,742	804	304	499	3,887	
	March	4,461	2,856	1,606	882	321	561	3,579	
	April	4,286	2,813	1,474	786	174	611	3,501	
	May	4,784	3,314	1,471	803	262	542	3,981	
	June	5,227	3,782	1,445	703	94	609	4,524	
	July	5,763	4,245	1,518	741	229	512	5,022	
	August	5,156	3,820	1,336	858	304	554	4,298	
	September	5,359	3,603	1,757	791	184	606	4,569	
	October	5,230	3,636	1,594	932	270	662	4,298	
	November	5,726	3,863	1,864	786	262	524	4,940	
	December	4,562	2,956	1,606	860	193	667	3,702	
		AVERAGE	5,041	3,461	1,581	815	222	579	4,226
1983	January	4,372	2,938	1,434	973	117	856	3,399	
	February*	R 3,691	R 2,268	R 1,423	865	262	603	2,825	
	March**	3,458	2,249	1,209	NA	NA	NA	NA	
	AVERAGE	3,845	2,492	1,353	NA	NA	NA	NA	

¹ Includes lease condensate.

² Includes crude oil for storage in the Strategic Petroleum Reserve.

³ Net Imports = Imports minus Exports.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.1.

** Italics denote preliminary data. See Explanatory Note 8.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil¹ Supply and Disposition

		Supply						
		Field Production		Imports			Stock Withdrawal ²	
		Total Domestic	Alaskan	Total	SPR ³	Other	SPR ³	Other
		Thousand Barrels per Day						
								Unac- accounted for Crude Oil
1973	AVERAGE	9,208	198	3,244		3,244	11	3
1974	AVERAGE	8,774	193	3,477		3,477	-62	-25
1975	AVERAGE	8,375	191	4,105		4,105	-17	17
1976	AVERAGE	8,132	173	5,287		5,287	-39	77
1977	AVERAGE	8,245	464	6,615	21	6,594	-20	-6
1978	AVERAGE	8,707	1,229	6,356	162	6,195	-163	-57
1979	AVERAGE	8,552	1,401	6,519	67	6,452	-67	-11
1980	AVERAGE	8,597	1,617	5,263	44	5,219	-45	34
1981								
	January	8,540	1,606	4,932	106	4,826	-151	113
	February	8,604	1,619	4,873	80	4,793	-127	-41
	March	8,613	1,618	4,521	140	4,382	-155	154
	April	8,557	1,608	4,338	272	4,066	-444	51
	May	8,501	1,580	4,287	386	3,901	-513	286
	June	8,629	1,632	4,061	318	3,743	-434	49
	July	8,500	1,605	4,296	175	4,121	-324	147
	August	8,583	1,602	4,179	257	3,922	-372	16
	September	8,604	1,607	4,740	435	4,305	-486	-295
	October	8,563	1,596	4,380	453	3,927	-501	166
	November	8,586	1,614	4,046	271	3,774	-259	279
	December	8,585	1,623	4,137	165	3,971	-252	52
	AVERAGE	8,572	1,609	4,396	256	4,141	-336	83
1982								
	January	8,669	1,712	3,648	170	3,478	-159	-138
	February	8,690	1,715	2,949	159	2,790	-213	199
	March	8,597	1,702	2,856	185	2,671	-235	278
	April	8,652	1,687	2,813	190	2,623	-233	56
	May	8,660	1,725	3,314	204	3,110	-176	105
	June	8,681	1,675	3,782	105	3,678	-105	110
	July	8,649	1,715	4,245	97	4,147	-97	1
	August	8,701	1,699	3,820	208	3,611	-208	140
	September	8,733	1,707	3,603	139	3,463	-143	-218
	October	8,676	1,677	3,636	216	3,420	-216	324
	November	8,690	1,667	3,863	180	3,683	-179	-141
	December	8,660	1,663	2,956	124	2,832	-125	2
	AVERAGE	8,671	1,695	3,461	165	3,296	-174	60
1983								
	January	8,634	1,698	2,938	219	2,720	-219	238
	February*	R 8,660	1,725	R 2,268	R 197	R 2,071	R -197	423
	March**	8,677	1,726	2,249	173	2,076	-180	NA
	AVERAGE	8,657	1,716	2,492	196	2,296	-199	NA

¹ Includes lease condensate.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Strategic Petroleum Reserve.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.2.

** Italics denote preliminary data. See Explanatory Note 8.

Note: Annual stock changes for 1975, 1981, and 1983 were calculated using expanded survey coverage.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil¹ Supply and Disposition (continued)

		Supply	Disposition				Ending Stocks ²		
		Crude Used Directly ³	Crude Losses	Refinery Inputs	Exports	Product Supplied ³	Total Crude Oil	SPR ⁴	Other Primary
		Thousand Barrels per Day					Millions of Barrels		
1973	AVERAGE	-19	13	12,431	2	NA	242		242
1974	AVERAGE	-15	13	12,133	3	NA	⁵ 265		⁵ 265
1975	AVERAGE	-17	13	12,442	6	NA	271		271
1976	AVERAGE	-18	15	13,416	8	NA	285		285
1977	AVERAGE	-14	16	14,602	50	NA	348	7	340
1978	AVERAGE	-14	16	14,739	158	NA	376	67	309
1979	AVERAGE	-13	16	14,648	235	NA	430	91	339
1980	AVERAGE	-13	15	13,481	287	NA	⁵ 466	108	⁵ 358
1981	January	-43	6	13,247	339	NA	486	112	374
	February	-55	3	12,902	198	NA	494	116	378
	March	-57	6	12,383	210	NA	514	121	393
	April	-59	3	12,091	198	NA	532	134	397
	May	-59	3	12,309	312	NA	544	150	394
	June	-58	7	12,415	123	NA	548	163	385
	July	-58	7	12,261	257	NA	559	173	386
	August	-58	5	12,908	204	NA	547	185	362
	September	-61	4	12,505	194	NA	555	199	356
	October	-63	3	12,057	226	NA	579	215	364
	November	-64	4	12,240	278	NA	589	223	366
	December	-63	4	12,349	189	NA	594	230	363
	AVERAGE	-58	5	12,470	228	NA			
1982	January	-63	3	11,638	238	NA	606	235	371
	February	-64	2	11,252	304	NA	612	241	371
	March	-63	5	11,277	321	NA	614	249	366
	April	-65	3	11,386	174	NA	611	256	355
	May	-62	3	11,801	262	NA	609	261	348
	June	-60	7	12,498	94	NA	607	264	343
	July	-60	3	12,447	229	NA	612	267	345
	August	-57	2	11,858	304	NA	625	274	352
	September	-56	3	12,126	184	NA	618	278	340
	October	-51	2	11,750	270	NA	635	285	351
	November	-51	1	11,741	262	NA	646	290	356
	December	-53	1	11,514	193	NA	⁵ 642	294	⁵ 348
	AVERAGE	-58	4	11,776	236	NA			
1983	January	NA	2	11,070	117	54	661	301	361
	February*	NA	3	R10,635	262	69	672	306	366
	March**	NA	NA	10,944	NA	NA	665	312	353
	AVERAGE	NA	NA	10,891	NA	NA			

¹ Includes lease condensate.² Ending stocks for 1973-1980 are totals as of December 31.³ Beginning in January 1983, crude oil used directly as fuel is presented as product supplied for crude oil. Prior to January 1983 crude oil used directly was included with crude oil losses in this table and with product supplied for distillate and residual fuel oils.⁴ Strategic Petroleum Reserve.⁵ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years.

The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage(new basis), end of year stocks would be: 1974-265, 1980-483(Total) and 375(Other Primary), and 1982-644(Total) and 350(Other Primary). Stock withdrawals during 1975, 1981 and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.2.

** Italics denote preliminary data. See Explanatory Note 8.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Finished Motor Gasoline Supply and Disposition

		Supply			Disposition				Ending Stocks ¹		
		Total Production	Imports ²	Stock With-drawal ^{2 3}	Exports	Product Supplied			Total Motor Gasoline ⁴	Finished Motor Gasoline	
						Total	Unleaded ⁵	Unleaded			
Thousand Barrels per Day								Percent of Total	Millions of Barrels		
1973	AVERAGE	6,535	134	9	4	6,674	NA	NA	209		
1974	AVERAGE	6,360	204	-24	2	6,537	NA	NA	⁶ 218		
1975	AVERAGE	6,520	184	-28	2	6,675	NA	NA	235		
1976	AVERAGE	6,841	131	10	3	6,978	NA	NA	231		
1977	AVERAGE	7,033	217	-72	2	7,177	1,976	27.5	258		
1978	AVERAGE	7,169	190	54	1	7,412	2,521	34.0	238		
1979	AVERAGE	6,852	181	2	(^s)	7,034	2,798	39.8	237		
1980	AVERAGE	6,506	140	-66	1	6,579	3,067	46.6	⁶ 261		
1981	January	6,715	138	-421	(^s)	6,431	3,141	48.8	276	227	
	February	6,308	111	-118	1	6,301	3,095	49.1	284	230	
	March	6,213	171	-81	(^s)	6,303	3,097	49.1	285	232	
	April	6,114	186	303	(^s)	6,602	3,284	49.7	272	223	
	May	6,122	150	344	1	6,615	3,115	47.1	259	213	
	June	6,220	186	622	1	7,028	3,419	48.6	242	194	
	July	6,405	151	268	(^s)	6,823	3,424	50.2	228	186	
	August	6,611	124	-95	3	6,637	3,344	50.4	233	189	
	September	6,564	169	-70	2	6,662	3,338	50.1	237	191	
	October	6,426	147	7	3	6,578	3,257	49.5	236	190	
	November	6,564	148	-338	1	6,373	3,198	50.2	248	201	
	December	6,586	197	-91	11	6,681	3,444	51.5	253	203	
	AVERAGE		6,405	157	28	2	6,588	3,264	49.5		
	1982	January	6,181	114	-358	18	5,920	3,033	51.2	262	214
February		5,917	133	28	8	6,070	3,145	51.8	262	213	
March		6,004	183	469	44	6,612	3,396	51.4	248	199	
April		6,104	177	641	33	6,890	3,494	50.7	223	180	
May		6,322	163	188	23	6,650	3,415	51.3	215	174	
June		6,767	195	-136	14	6,812	3,561	52.3	220	178	
July		6,788	200	-165	24	6,799	3,574	52.6	226	183	
August		6,447	284	-60	16	6,655	3,520	52.9	226	185	
September		6,530	215	-217	22	6,507	3,385	52.0	234	191	
October		6,253	177	-25	15	6,391	3,360	52.6	234	192	
November		6,273	206	91	11	6,559	3,448	52.6	230	189	
December		6,540	178	-164	7	6,548	3,486	53.2	⁶ 235	⁶ 194	
AVERAGE		6,347	186	24	20	6,537	3,403	52.1			
1983		January	6,020	148	-186	(^s)	5,981	3,352	56.0	251	208
	February*	R 5,848	R 142	R 32	(^s)	R 6,022	3,257	54.1	R 251	R 207	
	March**	5,895	150	610	NA	6,650	NA	NA	229	189	
	AVERAGE		5,923	147	156	NA	6,224	NA	NA		

¹ Ending stocks for 1973-1980 are totals as of December 31.

² Beginning in 1981, excludes blending components.

³ A negative number indicates an increase in stocks and a positive number indicates a decrease.

⁴ Includes motor gasoline blending components.

⁵ Includes gasohol.

⁶ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-225, 1980-263, 1982-244 (Total) and 203 (Finished). Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

(^s) = Less than 500 barrels per day. NA = Not available. R = Revised data.

* See Explanatory Note 9.3.

** Italics denote preliminary data. See Explanatory Note 8.

Note: Beginning in January 1981, survey forms were modified.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Distillate Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Crude Used Directly ³	Exports	Product Supplied ³	
Thousand Barrels per Day								Millions of Barrels
1973	AVERAGE	2,822	392	-115	2	9	3,092	196
1974	AVERAGE	2,669	289	-9	2	2	2,948	⁴ 200
1975	AVERAGE	2,654	155	40	2	1	2,851	209
1976	AVERAGE	2,924	146	62	1	1	3,133	186
1977	AVERAGE	3,278	250	-176	1	1	3,352	250
1978	AVERAGE	3,167	173	93	1	3	3,432	216
1979	AVERAGE	3,153	193	-34	1	3	3,311	229
1980	AVERAGE	2,662	142	64	1	3	2,866	⁴ 205
1981	January	2,989	273	836	11	(^s)	4,109	179
	February	2,809	325	246	11	17	3,373	173
	March	2,484	147	264	9	(^s)	2,904	164
	April	2,418	116	-9	10	3	2,532	165
	May	2,454	179	-232	10	(^s)	2,411	172
	June	2,501	225	-270	9	(^s)	2,464	180
	July	2,395	179	-204	10	2	2,378	186
	August	2,656	174	-450	8	(^s)	2,388	200
	September	2,610	129	-235	10	1	2,513	207
	October	2,485	119	197	9	5	2,803	201
	November	2,716	124	36	11	6	2,880	200
	December	2,856	95	277	11	26	3,212	192
	AVERAGE	2,613	173	38	10	5	2,829	
1982	January	2,615	96	780	10	90	3,410	166
	February	2,447	130	689	11	90	3,187	147
	March	2,294	48	612	10	84	2,881	128
	April	2,357	59	631	13	64	2,996	109
	May	2,618	74	-184	10	75	2,444	114
	June	2,731	100	-335	10	55	2,450	125
	July	2,734	124	-761	11	24	2,084	148
	August	2,526	79	-346	10	40	2,228	159
	September	2,658	59	-77	12	139	2,514	161
	October	2,837	97	-290	8	66	2,586	170
	November	2,863	141	-514	8	24	2,475	186
	December	2,655	109	226	10	143	2,856	⁴ 179
	AVERAGE	2,612	93	32	10	74	2,672	
1983	January	2,314	58	561	NA	173	2,760	168
	February*	R 2,136	R 58	R 742	NA	105	R 2,832	R 147
	March**	2,026	41	788	NA	NA	2,705	121
	AVERAGE	2,159	52	696	NA	NA	2,763	

¹ Ending Stocks for 1973-1980 are totals as of December 31.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Beginning in January 1983, product supplied for distillate fuel oil does not include crude oil used directly. See Explanatory Note 4.

⁴ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage(new basis), end of year stocks would be: 1974-224, 1980-205, and 1982-186. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

(^s) = Less than 500 barrels per day. NA = Not available. R = Revised data.

Totals may not equal sum of components due to independent rounding.

* See Explanatory Note 9.4.

** Italics denote preliminary data. See Explanatory Note 8.

Note: Beginning in January 1981, survey forms were modified.

Geographic Coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Residual Fuel Oil Supply and Disposition

	Supply				Disposition		Ending Stocks ¹
	Total Production	Imports	Stock Withdrawal ²	Crude Used Directly ³	Exports	Product Supplied ³	
	Thousand Barrels per Day						Millions of Barrels
1973 AVERAGE	971	1,853	5	17	23	2,822	53
1974 AVERAGE	1,070	1,587	-17	13	14	2,639	⁴ 60
1975 AVERAGE	1,235	1,223	2	15	15	2,462	74
1976 AVERAGE	1,377	1,413	5	17	12	2,801	72
1977 AVERAGE	1,754	1,359	-48	13	6	3,071	90
1978 AVERAGE	1,667	1,355	-1	13	13	3,023	90
1979 AVERAGE	1,687	1,151	-15	12	9	2,826	96
1980 AVERAGE	1,580	939	10	12	33	2,508	⁴ 92
1981 January	1,612	1,015	302	32	65	2,896	82
February	1,565	954	150	44	125	2,588	78
March	1,424	699	100	48	145	2,126	75
April	1,320	584	66	49	151	1,868	73
May	1,223	741	-170	49	25	1,817	78
June	1,232	540	291	49	76	2,037	69
July	1,174	830	2	48	82	1,971	69
August	1,231	819	-179	50	69	1,852	75
September	1,292	841	-176	51	126	1,882	80
October	1,238	786	8	54	202	1,884	80
November	1,227	880	-49	53	203	1,909	81
December	1,329	916	110	52	157	2,250	78
AVERAGE	1,321	800	37	48	118	2,088	
1982 January	1,183	821	328	53	235	2,150	68
February	1,136	928	358	53	213	2,261	58
March	1,121	910	26	53	197	1,912	57
April	1,162	762	124	52	234	1,867	54
May	1,127	738	-175	52	191	1,551	59
June	1,077	643	-49	50	217	1,504	61
July	1,029	576	51	49	239	1,466	59
August	1,007	519	200	47	235	1,538	53
September	1,007	871	-302	44	148	1,472	62
October	954	758	-56	43	234	1,466	64
November	989	843	-95	43	182	1,597	66
December	990	747	8	43	186	1,602	⁴ 66
AVERAGE	1,065	758	33	48	209	1,695	
1983 January	935	691	243	NA	294	1,574	61
February*	R 857	632	R 270	NA	191	R 1,568	R 53
March**	834	651	191	NA	NA	1,466	44
AVERAGE	876	659	233	NA	NA	1,535	

¹ Ending Stocks for 1973-1980 are totals as of December 31.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Beginning in January 1983, product supplied for residual fuel oil does not include crude oil used directly. See Explanatory Note 4.

⁴ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage(new basis), end of year stocks would be: 1974-75, 1980-91, and 1982-68. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.4.

** Italics denote preliminary data. See Explanatory Note 8.

Note: Beginning in January 1981, survey forms were modified.

Geographic Coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Liquefied Petroleum Gases Supply and Disposition

		Supply			Disposition			Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Refinery Inputs	Exports	Product Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	1,600	132	-35	220	27	1,449	99
1974	AVERAGE	1,565	123	-38	220	25	1,406	³ 113
1975	AVERAGE	1,527	112	-35	246	26	1,333	125
1976	AVERAGE	1,535	130	24	260	25	1,404	116
1977	AVERAGE	1,566	161	-55	233	18	1,422	136
1978	AVERAGE	1,537	123	12	239	20	1,413	132
1979	AVERAGE	1,556	217	70	236	15	1,592	111
1980	AVERAGE	1,535	216	-27	233	21	1,469	³ 120
1981	January	1,617	306	363	352	21	1,913	117
	February	1,593	327	173	303	21	1,769	112
	March	1,551	260	-4	257	20	1,530	112
	April	1,586	214	-236	231	26	1,308	119
	May	1,587	189	-258	220	19	1,279	127
	June	1,567	206	-208	237	24	1,304	133
	July	1,507	213	-258	215	17	1,229	141
	August	1,592	195	-242	235	149	1,160	149
	September	1,622	199	-75	287	21	1,438	151
	October	1,593	287	72	320	76	1,556	149
	November	1,571	280	86	383	58	1,495	146
	December	1,468	255	379	428	50	1,624	135
	AVERAGE	1,571	244	-18	289	42	1,466	
1982	January	1,546	314	480	398	67	1,873	122
	February	1,476	291	310	327	51	1,699	114
	March	1,523	223	145	289	74	1,528	109
	April	1,566	188	107	257	77	1,527	106
	May	1,583	186	-61	235	43	1,431	108
	June	1,571	192	-109	262	106	1,286	111
	July	1,556	227	-5	253	37	1,487	111
	August	1,591	125	-44	254	61	1,357	112
	September	1,606	247	33	273	85	1,528	111
	October	1,582	194	92	306	81	1,481	109
	November	1,603	267	172	370	37	1,634	103
	December	1,626	258	270	395	56	1,702	³ 95
	AVERAGE	1,570	225	115	301	65	1,544	
1983	January	1,662	240	618	313	118	2,088	84
	February*	1,560	305	84	237	76	1,636	81
	AVERAGE	1,614	271	365	277	98	1,874	

¹ Ending stocks for 1973 - 1980 are totals as of December 31.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage(new basis), end of year stocks would be: 1974-113, 1980-128, and 1982-103. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

* See Explanatory Note 9.5.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Other Petroleum Products¹ Supply and Disposition

		Supply			Disposition			Ending Stocks ²
		Total Production	Imports	Stock Withdrawal ³	Refinery Inputs	Exports	Products Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	3,693	502	-9	750	166	3,270	208
1974	AVERAGE	3,558	432	-28	665	174	3,123	⁴ 218
1975	AVERAGE	3,424	277	-2	537	160	3,002	219
1976	AVERAGE	3,643	206	-5	524	175	3,145	220
1977	AVERAGE	3,912	205	-27	514	165	3,410	230
1978	AVERAGE	4,046	166	14	492	167	3,568	225
1979	AVERAGE	4,153	195	-37	352	209	3,749	238
1980	AVERAGE	3,956	210	-23	311	198	3,634	⁴ 247
1981	January	3,821	162	80	851	132	3,081	296
	February	3,723	182	-200	538	208	2,958	302
	March	3,722	230	-55	642	210	3,043	304
	April	3,711	230	24	733	192	3,040	303
	May	3,892	229	-58	594	238	3,231	305
	June	3,925	218	-29	656	197	3,261	306
	July	3,852	149	284	791	212	3,282	297
	August	3,876	276	-33	676	219	3,225	298
	September	3,718	285	215	883	176	3,159	291
	October	3,503	241	193	710	227	3,000	285
	November	3,579	262	33	784	154	2,935	284
	December	3,543	243	71	805	223	2,829	282
	AVERAGE	3,739	226	46	723	199	3,088	
1982	January	3,181	240	-102	602	180	2,536	284
	February	3,364	260	-116	646	138	2,724	287
	March	3,485	241	-204	734	161	2,627	294
	April	3,394	287	91	801	204	2,767	291
	May	3,296	309	198	823	210	2,769	285
	June	3,481	315	115	815	216	2,879	281
	July	3,578	391	15	862	187	2,935	281
	August	3,519	329	256	841	202	3,060	273
	September	3,442	365	74	767	213	2,901	271
	October	3,472	367	223	901	266	2,896	264
	November	3,464	406	-12	824	269	2,766	264
	December	3,285	314	363	886	275	2,801	⁴ 253
	AVERAGE	3,413	319	77	793	211	2,805	
1983	January	3,222	297	-371	570	271	2,307	271
	February*	3,270	287	-1	680	232	2,645	271
	AVERAGE	3,245	292	-195	622	252	2,467	

¹ Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, and residual fuel oil.

² Ending Stocks for 1973-1980 are totals as of December 31.

³ A negative number indicates an increase in stocks and a positive number indicates a decrease.

⁴ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years.

The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage(new basis), end of year stocks would be: 1974-220, 1980-249, and 1982-259. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

* See Explanatory Note 9.6.

Geographic Coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil and Petroleum Product Imports from OPEC Sources¹

	Algeria	Libya	Saudi Arabia	United Arab Emirates	Indonesia	Iran	Nigeria	Venezuela	Other OPEC ²	Total OPEC	Total Arab OPEC ³
Thousand Barrels per Day											
1973											
AVERAGE	136	164	486	71	213	223	459	1,135	106	2,993	915
1974											
AVERAGE	190	4	461	74	300	469	713	979	88	3,280	752
1975											
AVERAGE	282	232	715	117	390	280	762	702	122	3,601	1,383
1976											
AVERAGE	432	453	1,230	254	539	298	1,025	700	134	5,066	2,424
1977											
AVERAGE	559	723	1,380	335	541	535	1,143	690	287	6,193	3,185
1978											
AVERAGE	649	654	1,144	385	573	555	919	645	226	5,751	2,963
1979											
AVERAGE	636	658	1,356	281	420	304	1,080	690	212	5,637	3,056
1980											
AVERAGE	488	554	1,261	172	348	9	857	481	130	4,300	2,551
1981											
January	341	500	1,284	93	424	0	908	549	27	4,127	2,219
February	381	468	1,122	93	406	0	866	463	92	3,891	2,064
March	352	485	1,027	47	328	0	771	360	54	3,425	1,912
April	263	485	1,034	68	307	0	812	237	39	3,245	1,867
May	393	443	933	17	297	0	664	331	124	3,203	1,796
June	356	380	865	60	367	0	528	248	118	2,922	1,703
July	333	251	1,073	80	340	0	651	466	38	3,233	1,757
August	348	274	1,082	61	377	0	321	523	84	3,070	1,765
September	336	154	1,477	96	371	0	323	359	149	3,264	2,063
October	242	147	1,342	90	427	0	412	389	172	3,220	1,820
November	210	132	1,270	112	353	0	517	535	56	3,184	1,724
December	176	122	1,045	158	400	0	684	411	132	3,129	1,502
AVERAGE	311	319	1,129	81	366	0	620	406	90	3,323	1,848
1982											
January	254	161	877	87	273	0	662	376	128	2,818	1,378
February	139	92	692	79	236	0	579	347	102	2,267	1,044
March	91	37	555	155	200	0	503	399	91	2,032	860
April	85	0	479	122	215	0	427	411	79	1,818	707
May	179	0	601	116	236	0	211	414	54	1,811	897
June	93	0	593	94	215	72	537	361	110	2,075	799
July	122	0	644	123	327	69	910	349	95	2,640	927
August	170	0	489	133	272	27	542	288	134	2,057	807
September	162	0	432	57	191	21	479	514	52	1,907	659
October	249	7	494	61	227	108	291	496	96	2,029	810
November	247	13	489	47	283	34	480	539	115	2,246	795
December	141	0	237	12	265	88	447	399	73	1,661	407
AVERAGE	161	26	548	91	245	35	505	408	94	2,113	840
1983											
January	204	0	282	47	255	43	186	324	43	1,384	533
February	104	0	214	9	217	0	92	371	28	1,035	326
AVERAGE	157	0	250	29	237	23	141	345	36	1,218	435

¹ Excludes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil processed in OPEC countries.

² Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar.

³ Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait, and Qatar.

Totals may not equal sum of components due to independent rounding.

Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil and Petroleum Product Imports from Non-OPEC Sources¹

	Bahamas	Canada	Mexico	Netherlands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico ²	Virgin Islands ²	Other	Total
Thousand Barrels per Day										
1973										
AVERAGE	174	1,325	16	585	255	15	99	329	465	3,263
1974										
AVERAGE	164	1,070	8	511	251	8	90	391	340	2,832
1975										
AVERAGE	152	846	71	332	242	14	90	406	300	2,454
1976										
AVERAGE	118	599	87	275	274	31	88	422	353	2,247
1977										
AVERAGE	171	517	179	211	289	126	105	466	550	2,614
1978										
AVERAGE	160	467	318	229	253	180	94	429	484	2,613
1979										
AVERAGE	147	538	439	231	190	202	92	431	548	2,819
1980										
AVERAGE	78	455	533	225	176	176	88	388	491	2,609
1981										
January	39	543	401	198	150	233	89	494	552	2,701
February	84	546	437	227	163	271	46	481	626	2,881
March	74	472	488	227	93	263	45	370	571	2,603
April	68	412	418	198	139	402	40	365	380	2,423
May	122	365	522	213	105	368	58	344	474	2,573
June	51	353	538	196	124	397	67	262	525	2,513
July	77	382	384	212	178	553	50	206	541	2,583
August	69	378	489	255	123	592	68	184	539	2,698
September	111	423	708	163	169	528	72	265	661	3,100
October	63	449	669	161	121	351	60	303	562	2,739
November	63	547	628	168	108	253	76	294	421	2,557
December	70	501	587	148	125	280	73	367	563	2,714
AVERAGE	74	447	522	197	133	375	62	327	534	2,672
1982										
January	28	509	426	179	106	346	62	334	425	2,415
February	50	533	489	221	120	132	38	354	487	2,424
March	43	435	503	189	118	293	62	307	479	2,429
April	67	357	467	180	166	247	36	266	682	2,468
May	76	416	767	152	95	516	47	302	603	2,974
June	32	462	797	141	129	539	58	322	673	3,153
July	30	527	783	158	111	433	38	369	674	3,122
August	68	435	854	145	106	520	24	320	627	3,099
September	92	484	897	195	89	631	51	270	744	3,453
October	45	456	682	148	109	666	52	262	783	3,202
November	48	547	860	203	90	623	81	334	694	3,480
December	89	561	675	174	102	438	48	336	480	2,901
AVERAGE	56	477	684	173	112	451	50	315	613	2,928
1983										
January	68	536	849	218	73	315	40	299	588	2,988
February	92	592	722	179	81	193	50	192	554	2,655
AVERAGE	79	563	789	200	77	257	45	248	572	2,830

¹ Includes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries.

² U.S. Possessions.

Totals may not equal sum of components due to independent rounding.

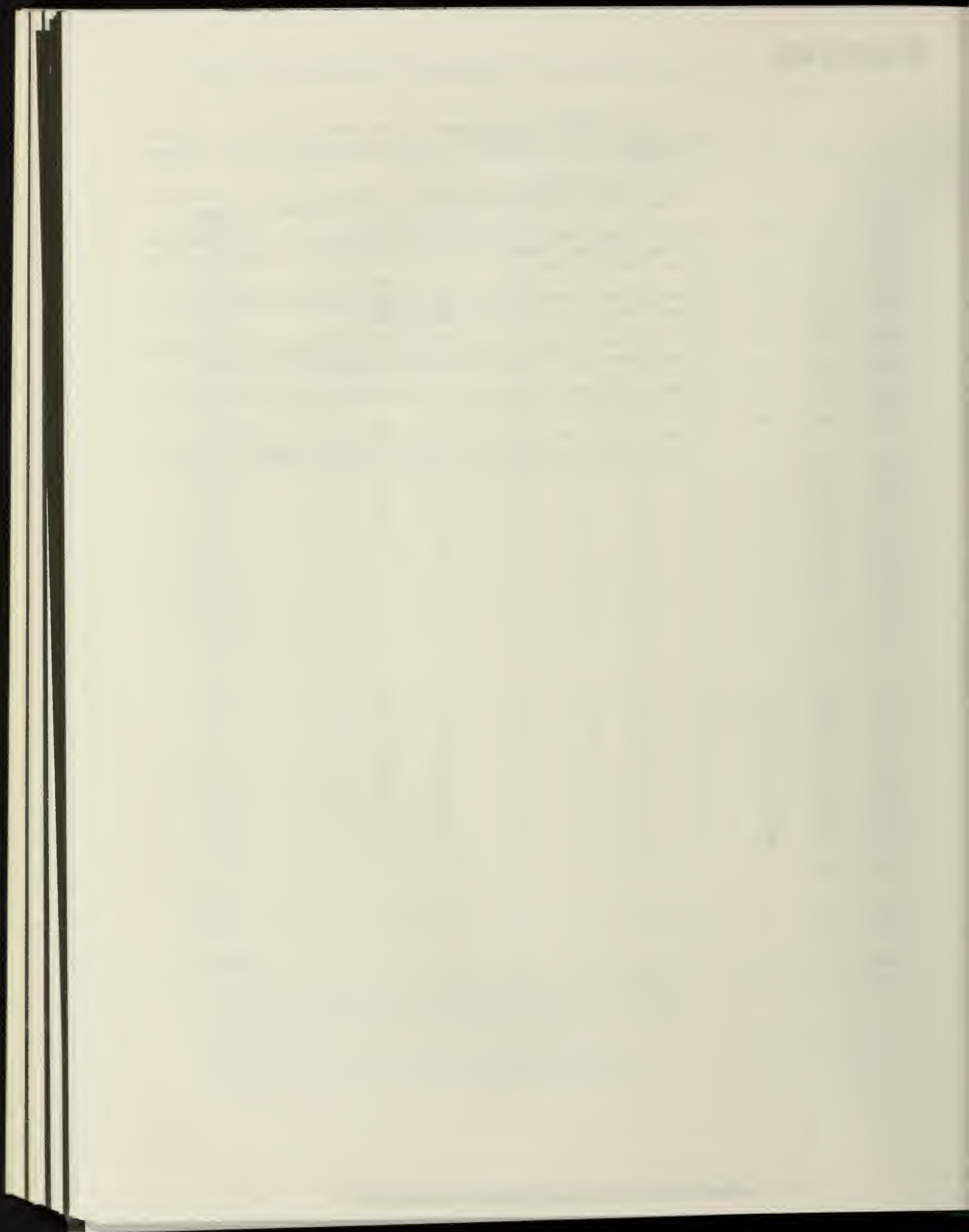
Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Sources

1. 1973 through 1976: Bureau of Mines, U.S. Department of the Interior, *Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual*, Mineral Industry Surveys.
2. 1977 through 1980: Energy Information Administration, U.S. Department of Energy, *Monthly Petroleum Statistics Report*, (unleaded gasoline category).
3. 1977 through 1980: Energy Information Administration, U.S. Department of Energy, *Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual*, Energy Data Reports.
4. January 1981 through December 1981: Energy Information Administration, U.S. Department of Energy, *Petroleum Supply Annual*.
5. January 1982 through January 1983: Detailed statistics in appropriate issues of the *Petroleum Supply Monthly*. (See Explanatory Notes 9.1 through 9.6).
6. March 1983: Estimates based on EIA weekly data (except domestic crude oil production) (See Explanatory Note 1.1).
7. January 1982 through March 1983: Domestic crude oil production estimate based on historical statistics from State Conservation Agencies and the U.S. Geological Survey. (See Explanatory Note 3).



Detailed Statistics



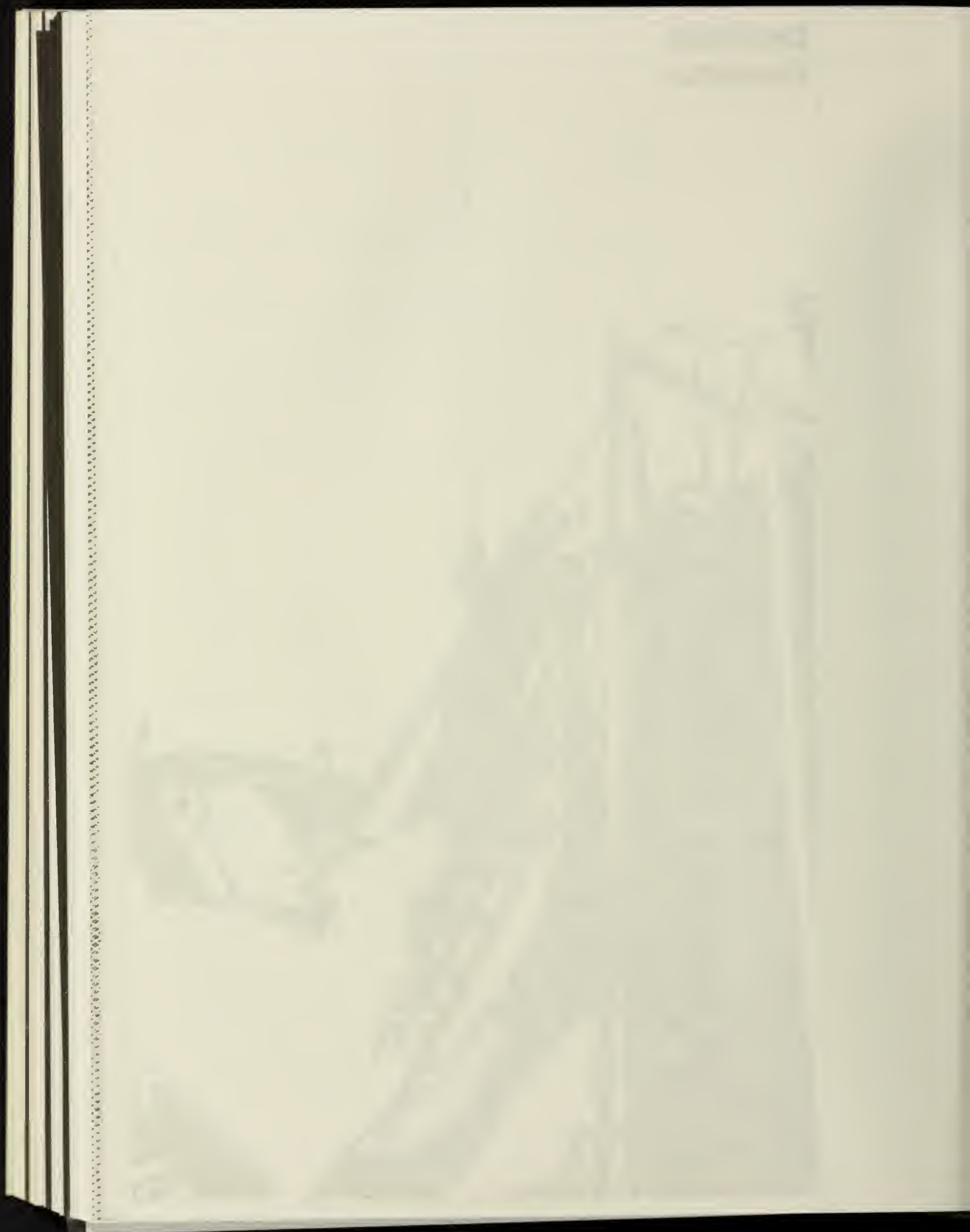


Table 1. U.S. Petroleum Balance, February 1983

	Current Month		Year-to-date	
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
Crude Oil (Including Lease Condensate)				
Field Production				
(1) Alaska	E 48,303	1,725	E 100,944	1,711
(2) Lower 48 States	E 194,178	6,935	E 409,197	6,936
(3) Total U.S.	E 242,481	8,660	E 510,141	8,646
Net Imports				
(4) Imports (Gross Excluding SPR)	57,975	2,071	142,279	2,412
(5) SPR Imports	5,518	197	12,293	208
(6) Exports	7,338	262	10,963	186
(7) Imports (Net Including SPR)	56,154	2,006	143,609	2,434
Other Sources				
(8) SPR Withdrawal (+) or Addition (-)	-5,520	-197	-12,306	-209
(9) Other Stock Withdrawal (+) or Addition (-)	-5,170	-185	-15,976	-271
(10) Product Supplied and Losses	-2,012	-72	-3,744	-63
(11) Unaccounted for 1	11,837	423	19,206	326
(12) Total Other Sources	-865	-31	-12,819	-217
(13) Crude Input to Refineries	297,770	10,635	640,930	10,863
(13) = (3) + (7) + (12)				
Natural Gas Plant Liquids (NGPL)				
(14) Field Production	44,385	1,585	96,091	1,629
(15) Imports 2	240	9	725	12
(16) Stock Withdrawal (+) or Addition (-) 2	-1,118	-40	-1,512	-26
(17) Total NGPL Supply	43,507	1,554	95,304	1,615
Other Liquids				
Unfinished Oils and Gasoline Blending Components, Total				
(18) Stock Withdrawal (+) or Addition (-)	816	29	-5,101	-86
(19) Imports	5,233	187	11,531	195
(20) Other Hydrocarbons and Alcohol New Supply (Field Production)	1,485	53	3,154	53
(21) Refinery Processing Gain 1	13,480	481	28,271	479
(22) Crude Oil Product Supplied	1,941	69	3,613	61
(23) Total Other Liquids	22,955	820	41,468	703
(23) = (18) through (22)				
(24) Total Production of Products 3	364,232	13,008	777,702	13,181
(24) = (13) + (17) + (23)				
Net Imports of Refined Products 3				
(25) Imports (Gross)	34,370	1,227	72,036	1,221
(26) Exports	16,892	603	43,441	736
(27) Imports (Net)	17,477	624	28,594	485
(28) Total New Supply of Products	381,709	13,632	806,296	13,666
(28) = (24) + (27)				
(29) Refined Products Stock Withdrawal (+) or Addition (-) 3	31,906	1,140	65,031	1,102
(30) Total Petroleum Products Supplied for Domestic Use	413,615	14,772	871,327	14,768
(30) = (28) + (29)				
(31) Finished Motor Gasoline	168,623	6,022	354,038	6,001
(32) Distillate Fuel Oil	79,282	2,832	164,838	2,794
(33) Residual Fuel Oil	43,900	1,568	92,710	1,571
(34) Liquefied Petroleum Gases	45,811	1,636	110,547	1,874
(35) Other 4	74,058	2,645	145,581	2,467
(36) Crude Oil	1,941	69	3,613	61
(37) Total Product Supplied	413,615	14,772	871,327	14,768
(37) = (31) through (36)				
Ending Stocks, All Oils				
(38) Crude Oil and Lease Condensate (Excluding SPR)	366,020	--	366,020	--
(39) Strategic Petroleum Reserve (SPR)	306,133	--	306,133	--
(40) Unfinished Oils	108,313	--	108,313	--
(41) Gasoline Blending Components	44,610	--	44,610	--
(42) Natural Gasoline and Unfractionated Stream	12,980	--	12,980	--
(43) Finished Refined Products 3	593,825	--	593,825	--
(44) Total Stocks	1,431,881	--	1,431,881	--

1 A balancing item.

2 Includes isopentane, natural gasoline, unfractionated stream, and plant condensate only.

3 For products included see Explanatory Note 9.7.

4 Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil and liquefied petroleum gases.

E = Estimated.

-- Not Applicable.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1, 2, and 9.7.

Table 2. Supply and Disposition of Crude Oil and Petroleum Products, February 1983
(Thousands of Barrels)

Commodity	Supply				Disposition					
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 242,481	0	63,492	-10,690	11,837	71	297,770	7,338	1,941	672,153
Natural Gas Liquids and LRGs	44,104	7,599	8,767	1,240	0	0	12,561	2,117	47,032	94,195
Natural Gasoline and Isopentane	7,511	0	0	-1,285	0	0	5,007	0	1,219	6,471
Unfractionated Stream	-64	0	0	65	0	0	1	0	0	5,131
Plant Condensate	571	0	240	102	0	0	911	0	2	1,378
Liquefied Petroleum Gases	36,086	7,599	8,527	2,358	0	0	6,642	2,117	45,811	81,215
Ethane	7,374	247	587	-1,307	0	0	53	(s)	6,848	5,228
Propane	12,544	7,239	1,566	4,408	0	0	118	1,499	24,139	41,982
Butane	5,961	164	1,352	-100	0	0	4,679	618	2,080	12,891
Butane-Propane Mixtures	192	-45	791	180	0	0	132	0	986	1,218
Ethane-Propane Mixtures	7,475	0	4,232	-801	0	0	0	0	10,906	12,845
Isobutane	2,540	-6	0	-22	0	0	1,660	0	852	7,051
Other Liquids	1,485	0	5,233	816	0	0	13,109	0	-5,575	152,923
Other Hydrocarbons and Alcohol	1,485	0	0	27	0	0	1,512	0	0	282
Unfinished Oils	0	0	3,876	1,962	0	0	9,202	0	-3,364	108,313
Motor Gasoline Blending Components	0	0	1,356	-1,180	0	0	2,405	0	-2,229	43,787
Aviation Gasoline Blending Components	0	0	0	7	0	0	-10	0	17	541
Finished Petroleum Products	281	329,321	25,843	29,548	0	0	0	14,775	370,218	512,610
Finished Motor Gasoline	82	163,666	3,976	905	0	0	0	6	168,623	207,406
Finished Leaded Motor Gasoline	49	73,609	2,028	1,739	0	0	0	6	77,419	104,473
Finished Unleaded Motor Gasoline	33	90,057	1,948	-834	0	0	0	0	91,204	102,933
Finished Aviation Gasoline	31	496	209	81	0	0	0	0	817	2,517
Naphtha-Type Jet Fuel	0	6,169	0	428	0	0	0	0	6,597	7,186
Kerosene-Type Jet Fuel	0	22,017	227	749	0	0	0	223	22,770	33,296
Kerosene	3	3,753	40	514	0	0	0	(s)	4,310	8,841
Distillate Fuel Oil	3	59,814	1,612	20,784	0	0	0	2,931	79,282	147,410
Residual Fuel Oil	0	23,985	17,691	7,573	0	0	0	5,348	43,900	53,122
Naphtha < 400 Deg. for Petro. Feed. Use	0	3,537	509	-94	0	0	0	99	3,853	2,123
Other Oils < 400 Deg. for Petro. Feed. Use	0	7,250	0	373	0	0	0	616	7,007	1,714
Other Oils > 400 Deg. for Petro. Feed. Use	0	7,250	0	373	0	0	0	248	1,806	3,109
Special Naphthas	24	1,399	456	175	0	0	0	374	3,460	14,084
Lubricants	0	3,705	208	-79	0	0	0	20	421	806
Waxes	0	438	22	-18	0	0	0	4,844	6,385	6,895
Petroleum Coke	0	11,088	0	141	0	0	0	45	3,767	22,134
Asphalt and Road Oil	0	5,923	117	-2,227	0	0	0	0	14,150	0
Still Gas	0	14,150	0	0	0	0	0	0	0	1,967
Miscellaneous Products	138	1,931	776	243	0	0	0	19	3,069	1,967
Total	288,351	336,920	103,335	20,914	11,837	71	323,440	24,230	413,616	1,431,881

¹ Unaccounted for crude oil is a balancing item.

(s) Less than 500 Barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 3. Year-to-Date Supply and Disposition Statistics of Crude Oil and Petroleum Products, February 1983
(Thousands of Barrels)

Commodity	Supply				Disposition				Ending Stocks	
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports		Products Supplied
Crude Oil (including lease condensate)	E 510,141	0	154,572	-28,282	19,206	131	640,930	10,963	3,613	672,153
Natural Gas Liquids and LRGs	95,474	16,081	16,683	19,991	0	0	28,693	5,780	113,756	94,195
Natural Gasoline and Isopentane	13,836	0	235	-484	0	0	10,383	0	3,204	6,471
Unfractionated Stream	1,174	0	0	-1,092	0	0	82	0	0	5,131
Plant Condensate	1,349	0	490	64	0	0	1,898	0	5	1,378
Liquefied Petroleum Gases	79,115	16,081	15,959	21,503	0	0	16,330	5,780	110,547	81,215
Ethane	15,713	460	2,696	743	0	0	104	(s)	19,508	5,228
Propane	28,430	15,375	3,651	16,255	0	0	238	3,578	59,895	41,982
Butane	12,387	307	3,750	3,791	0	0	9,309	2,203	8,724	12,891
Butane-Propane Mixtures	334	-66	1,630	907	0	0	371	0	2,434	1,218
Ethane-Propane Mixtures	16,706	0	4,232	-1,563	0	0	0	0	19,375	12,845
Isobutane	5,545	5	0	1,370	0	0	6,308	0	612	7,051
Other Liquids	3,154	0	11,531	-5,101	0	0	24,350	0	-14,766	152,923
Other Hydrocarbons and Alcohol	3,154	0	0	29	0	0	3,183	0	0	282
Unfinished Oils	0	0	9,795	-3,036	0	0	15,257	0	-8,498	108,313
Motor Gasoline Blending Components	0	0	1,736	-2,045	0	0	5,279	0	-5,588	43,787
Aviation Gasoline Blending Components	0	0	0	-49	0	0	631	0	-680	541
Finished Petroleum Products	617	706,163	56,077	43,528	0	0	0	37,661	768,724	512,610
Finished Motor Gasoline	153	350,205	8,569	-4,869	0	0	0	20	354,038	207,406
Finished Leaded Motor Gasoline	108	156,638	4,527	-2,318	0	0	0	20	158,935	104,473
Finished Unleaded Motor Gasoline	45	193,567	4,042	-2,551	0	0	0	0	195,103	102,933
Finished Aviation Gasoline	63	1,138	209	-203	0	0	0	0	1,207	2,517
Naphtha-Type Jet Fuel	0	12,297	0	3	0	0	0	(s)	12,300	7,186
Kerosene-Type Jet Fuel	0	47,057	1,058	-1,295	0	0	0	495	46,325	33,296
Kerosene	7	7,893	74	1,951	0	0	0	(s)	9,924	8,841
Distillate Fuel Oil	5	131,538	3,418	38,169	0	0	0	8,292	164,838	147,410
Residual Fuel Oil	0	52,975	39,101	15,107	0	0	0	14,473	92,710	53,122
Naphtha < 400 Deg. for Petro. Feed. Use	0	6,809	773	-156	0	0	0	164	7,262	2,123
Other Oils > 400 Deg. for Petro. Feed. Use	0	14,568	0	466	0	0	0	853	14,181	1,714
Special Naphthas	71	2,776	1,026	365	0	0	0	290	3,948	3,109
Lubricants	0	7,929	496	-903	0	0	0	793	6,729	14,084
Waxes	0	837	81	-20	0	0	0	41	857	806
Petroleum Coke	0	23,728	0	-174	0	0	0	12,075	11,479	6,895
Asphalt and Road Oil	0	12,288	133	-4,865	0	0	0	106	7,450	22,134
Still Gas	0	30,093	0	0	0	0	0	0	30,093	0
Miscellaneous Products	318	4,032	1,140	-48	0	0	0	57	5,385	1,967
Total	609,386	722,244	238,863	30,136	19,206	131	693,973	54,404	871,327	1,431,881

¹ Unaccounted for crude oil is a balancing item.

(s) Less than 500 barrels or less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, February 1983
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Stock Withdrawal(+) Addition(-)	Unaccounted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (Including lease condensate)	E 8,660	0	2,268	-382	423	3	10,635	262	69
Natural Gas Liquids and LRGs	1,575	271	313	44	0	0	449	76	1,680
Natural Gasoline and Isopentane	268	0	0	-46	0	0	179	0	44
Unfractionated Stream	-2	0	0	2	0	0	(s)	0	(s)
Plant Condensate	20	0	9	4	0	0	33	0	(s)
Liquefied Petroleum Gases	1,289	271	305	84	0	0	237	76	1,636
Ethane	263	9	21	-47	0	0	2	(s)	245
Propane	448	259	56	157	0	0	4	54	862
Butane	213	6	48	-4	0	0	167	22	74
Butane-Propane Mixtures	7	-2	28	6	0	0	5	0	35
Ethane-Propane Mixtures	267	0	151	-29	0	0	0	0	389
Isobutane	91	(s)	0	-1	0	0	59	0	30
Other Liquids	53	0	187	29	0	0	468	0	-199
Other Hydrocarbons and Alcohol	53	0	0	1	0	0	54	0	0
Unfinished Oils	0	0	138	70	0	0	329	0	-120
Motor Gasoline Blending Components	0	0	48	-42	0	0	86	0	-80
Aviation Gasoline Blending Components	0	0	0	(s)	0	0	(s)	0	1
Finished Petroleum Products	10	11,761	923	1,055	0	0	0	528	13,222
Finished Motor Gasoline	3	5,845	142	32	0	0	0	(s)	6,022
Finished Leaded Motor Gasoline	2	2,629	72	62	0	0	0	(s)	2,765
Finished Unleaded Motor Gasoline	1	3,216	70	-30	0	0	0	0	3,257
Finished Aviation Gasoline	1	18	7	3	0	0	0	0	29
Naphtha-Type Jet Fuel	0	220	0	15	0	0	0	0	236
Kerosene-Type Jet Fuel	0	786	8	27	0	0	0	8	813
Kerosene	(s)	134	1	18	0	0	0	(s)	154
Distillate Fuel Oil	(s)	2,136	58	742	0	0	0	105	2,832
Residual Fuel Oil	0	857	632	270	0	0	0	191	1,568
Naphtha < 400 Deg. for Petro. Feed. Use	0	126	18	-3	0	0	0	4	138
Other Oils > 400 Deg. for Petro. Feed. Use	0	259	0	13	0	0	0	22	250
Special Naphthas	1	50	16	6	0	0	0	9	64
Lubricants	0	132	7	-3	0	0	0	13	124
Waxes	0	16	1	-1	0	0	0	1	15
Petroleum Coke	0	396	0	5	0	0	0	173	228
Asphalt and Road Oil	0	212	4	-80	0	0	0	2	135
Still Gas	0	505	0	0	0	0	0	0	505
Miscellaneous Products	5	69	28	9	0	0	0	1	110
Total	10,298	12,033	3,691	747	423	3	11,551	865	14,772

¹ Unaccounted for crude oil is a balancing item.

(s) Less than 500 Barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, February 1983
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Stock Withdrawal(+) Addition(-)	Unaccounted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 8,646	0	2,620	-479	326	2	10,863	186	61
Natural Gas Liquids and LRGs	1,618	273	283	339	0	0	486	98	1,928
Natural Gasoline and Isopentane	235	0	4	-8	0	0	176	0	54
Unfractionated Stream	20	0	0	-19	0	0	1	0	(s)
Plant Condensate	23	0	8	1	0	0	32	0	(s)
Liquefied Petroleum Gases	1,341	273	270	364	0	0	277	98	1,874
Ethane	266	8	46	13	0	0	2	(s)	331
Propane	482	261	62	276	0	0	4	61	1,015
Butane	210	5	64	64	0	0	158	37	148
Butane-Propane Mixtures	6	-1	28	15	0	0	6	0	41
Ethane-Propane Mixtures	283	0	72	-26	0	0	0	0	328
Isobutane	94	(s)	0	23	0	0	107	0	10
Other Liquids	53	0	195	-86	0	0	413	0	-250
Other Hydrocarbons and Alcohol	53	0	0	(s)	0	0	54	0	0
Unfinished Oils	0	0	166	-51	0	0	259	0	-144
Motor Gasoline Blending Components	0	0	29	-35	0	0	89	0	-95
Aviation Gasoline Blending Components	0	0	0	-1	0	0	11	0	-12
Finished Petroleum Products	10	11,969	950	738	0	0	0	638	13,029
Finished Motor Gasoline	3	5,936	145	-83	0	0	0	(s)	6,001
Finished Leaded Motor Gasoline	2	2,655	77	-39	0	0	0	(s)	2,694
Finished Unleaded Motor Gasoline	1	3,281	69	-43	0	0	0	0	3,307
Finished Aviation Gasoline	1	19	4	-3	0	0	0	0	20
Naphtha-Type Jet Fuel	0	208	0	(s)	0	0	0	(s)	208
Kerosene-Type Jet Fuel	0	798	18	-22	0	0	0	0	785
Kerosene	(s)	134	1	33	0	0	0	(s)	168
Distillate Fuel Oil	(s)	2,229	58	647	0	0	0	141	2,794
Residual Fuel Oil	0	898	663	256	0	0	0	245	1,571
Naphtha < 400 Deg. for Petro. Feed. Use	0	115	13	-3	0	0	0	3	123
Other Oils > 400 Deg. for Petro. Feed. Use	0	247	0	8	0	0	0	14	240
Special Naphthas	1	47	17	6	0	0	0	5	67
Lubricants	0	134	8	-15	0	0	0	13	114
Waxes	0	14	1	(s)	0	0	0	1	15
Petroleum Coke	0	402	0	-3	0	0	0	205	195
Asphalt and Road Oil	0	208	2	-82	0	0	0	2	126
Still Gas	0	510	0	0	0	0	0	0	510
Miscellaneous Products	5	68	19	-1	0	0	0	1	91
Total	10,329	12,241	4,049	511	326	2	11,762	922	14,768

¹ Unaccounted for crude oil is a balancing item.

(s) Less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 6. PAD District I, Supply and Disposition of Crude Oil and Petroleum Products, February 1983
(Thousands of Barrels)

Commodity	Supply				Disposition					Ending Stocks	
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs	Exports		Products Supplied
Crude Oil (Including lease condensate)	E 2,330	0	20,460	294	436	3,569	0	27,089	0	0	17,240
Natural Gas Liquids and LRGs	870	1,224	237	311	0	2,721	0	117	217	5,029	5,238
Liquefied Petroleum Gases	648	1,224	144	299	0	2,721	0	98	217	4,721	5,209
Other Products ²	222	0	93	12	0	0	0	19	0	308	29
Other Liquids	81	0	2,273	-524	0	1,481	0	3,577	0	-266	18,284
Other Hydrocarbons and Alcohol	81	0	0	21	0	0	0	102	0	0	52
Unfinished Oils	0	0	1,921	-276	0	1,431	0	3,565	0	-489	13,033
Motor Gasoline Blending Components	0	0	352	-269	0	50	0	-90	0	223	5,199
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0
Finished Petroleum Products	63	31,226	20,698	25,754	0	65,252	0	0	1,864	141,129	166,017
Finished Motor Gasoline	63	15,602	2,645	4,194	0	35,019	0	0	1	57,522	60,811
Finished Leaded Motor Gasoline	39	6,002	983	3,072	0	14,081	0	0	1	24,175	29,768
Finished Unleaded Motor Gasoline	24	9,600	1,662	1,122	0	20,938	0	0	0	33,346	31,043
Finished Aviation Gasoline	0	-1	209	-49	0	140	0	0	0	299	496
Naphtha-Type Jet Fuel	0	347	0	190	0	429	0	0	0	966	847
Kerosene-Type Jet Fuel	0	607	227	773	0	8,101	0	0	0	9,708	8,898
Kerosene	0	467	40	-18	0	1,051	0	0	0	1,540	3,975
Distillate Fuel Oil	0	6,381	1,055	15,849	0	15,493	0	0	618	38,160	55,269
Residual Fuel Oil	0	3,536	16,214	4,795	0	3,421	0	0	434	27,532	25,074
Naphtha and Other Oils for Petrochem.	0	299	6	94	0	27	0	0	46	380	49
Feedstock	0	24	83	20	0	327	0	0	232	223	863
Special Naphthas	0	404	107	36	0	467	0	0	103	912	3,560
Lubricants	0	75	5	2	0	6	0	0	6	82	182
Waxes	0	1,026	0	-15	0	0	0	0	372	639	869
Petroleum Coke	0	611	105	-337	0	116	0	0	41	455	4,748
Asphalt and Road Oil	0	1,517	0	0	0	0	0	0	0	1,517	0
Still Gas	0	331	1	220	0	655	0	0	11	1,195	376
Miscellaneous Products	0	0	0	0	0	0	0	0	0	0	0
Total	3,344	32,450	43,668	25,835	436	73,023	0	30,783	2,082	145,892	206,779

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(§) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 7. PAD District II Supply and Disposition of Crude Oil and Petroleum Products, February 1983
(Thousands of Barrels)

Commodity	Supply				Disposition						
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (Including lease condensate)	E 28,913	0	8,554	-5,798	40,383	-242	0	71,810	0	0	83,980
Natural Gas Liquids and LRGs	8,599	2,189	6,709	-620	0	2,563	0	4,234	10	15,196	30,951
Liquefied Petroleum Gases	8,900	2,189	6,709	-142	0	1,844	0	2,839	10	16,651	27,519
Other Products ²	-301	0	0	-478	0	719	0	1,395	0	-1,455	3,432
Other Liquids	324	0	360	-925	0	1,072	0	1,054	0	-223	27,168
Other Hydrocarbons and Alcohol	324	0	0	-11	0	0	0	313	0	0	113
Unfinished Oils	0	0	130	451	0	114	0	560	0	135	16,422
Motor Gasoline Blending Components	0	0	230	-1,316	0	958	0	214	0	-342	10,461
Aviation Gasoline Blending Components	0	0	0	-49	0	0	0	-33	0	-16	172
Finished Petroleum Products	9	78,698	1,029	853	0	9,753	0	0	101	90,241	144,958
Finished Motor Gasoline	0	46,648	244	-644	0	7,481	0	0	0	53,729	66,784
Finished Leaded Motor Gasoline	0	22,580	233	100	0	3,716	0	0	0	26,629	34,952
Finished Unleaded Motor Gasoline	0	24,068	11	-744	0	3,765	0	0	0	27,100	31,832
Finished Aviation Gasoline	0	181	0	-40	0	36	0	0	0	177	675
Naphtha-Type Jet Fuel	0	913	0	43	0	117	0	0	0	1,073	1,678
Kerosene-Type Jet Fuel	0	3,505	0	693	0	522	0	0	0	4,720	7,132
Kerosene	0	429	0	257	0	142	0	0	0	828	2,509
Distillate Fuel Oil	0	14,374	405	834	0	1,843	0	0	(s)	17,456	46,371
Residual Fuel Oil	0	2,740	253	486	0	-555	0	0	0	2,924	4,503
Naphtha and Other Oils for Petro. Feed.	0	461	43	10	0	-8	0	0	20	486	299
Special Naphthas	0	413	63	13	0	64	0	0	4	549	598
Lubricants	0	727	6	231	0	109	0	0	12	1,061	2,438
Waxes	0	30	3	13	0	0	0	0	(s)	45	74
Petroleum Coke	0	2,926	0	110	0	0	0	0	62	2,974	1,970
Asphalt and Road Oil	0	2,019	3	-1,137	0	115	0	0	1	999	9,709
Still Gas	0	3,194	0	0	0	0	0	0	0	3,194	0
Miscellaneous Products	9	138	8	-16	0	-113	0	0	1	25	218
Total	37,845	80,887	16,651	-6,490	40,383	13,146	0	77,098	111	105,214	287,057

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(*) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 8. PAD District III Supply and Disposition of Crude Oil and Petroleum Products, February 1983
(Thousands of Barrels)

Commodity	Supply				Disposition				Ending Stocks		
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs		Exports	Products Supplied
Crude Oil (including lease condensate)	E 115,909	0	28,681	-3,731	-24,734	16,258	47	132,328	0	8	468,544
Natural Gas Liquids and LRGs	31,622	2,926	858	1,196	0	-4,636	0	6,695	1,772	23,500	55,244
Liquefied Petroleum Gases	25,132	2,926	858	1,931	0	-4,714	0	2,664	1,772	21,698	46,460
Other Products ²	6,490	0	0	-735	0	78	0	4,031	0	1,802	8,784
Other Liquids	701	0	2,565	2,967	0	-2,553	0	8,512	0	-4,812	65,637
Other Hydrocarbons and Alcohol	701	0	0	16	0	0	0	717	0	0	112
Unfinished Oils	0	0	1,816	2,615	0	-1,545	0	5,241	0	-2,355	48,675
Motor Gasoline Blending Components	0	0	748	270	0	-1,008	0	2,501	0	-2,491	16,530
Aviation Gasoline Blending Components	0	0	0	86	0	0	0	53	0	33	320
Finished Petroleum Products	191	148,762	2,115	3,006	0	-78,881	0	0	6,297	68,896	125,192
Finished Motor Gasoline	4	69,504	(s)	-1,916	0	-44,217	0	0	(s)	23,375	50,068
Finished Leaded Motor Gasoline	4	29,738	(s)	-566	0	-18,757	0	0	(s)	10,419	24,504
Finished Unleaded Motor Gasoline	0	39,766	0	-1,350	0	-25,460	0	0	0	12,956	25,564
Finished Aviation Gasoline	31	179	0	81	0	-194	0	0	0	97	686
Naphtha-Type Jet Fuel	0	3,101	0	196	0	-687	0	0	0	2,610	2,474
Kerosene-Type Jet Fuel	0	11,219	0	-762	0	-9,477	0	0	(s)	980	10,142
Kerosene	3	2,456	0	455	0	-1,193	0	0	(s)	1,721	1,934
Distillate Fuel Oil	3	26,939	5	2,784	0	-17,680	0	0	97	11,954	28,935
Residual Fuel Oil	0	9,382	541	2,339	0	-3,720	0	0	2,800	5,742	13,981
Naphtha and Other Oils for Petro. Feed	0	9,483	437	77	0	-19	0	0	646	9,332	2,989
Special Naphthas	24	861	291	156	0	-391	0	0	11	930	1,409
Lubricants	0	2,281	72	-214	0	-519	0	0	212	1,407	6,584
Waxes	0	270	9	-29	0	-6	0	0	11	234	485
Petroleum Coke	0	3,970	0	27	0	0	0	0	0	1,482	722
Asphalt and Road Oil	0	1,944	0	-221	0	-231	0	0	2,515	1,492	3,697
Still Gas	0	5,866	0	0	0	0	0	0	(s)	5,866	0
Miscellaneous Products	126	1,307	759	33	0	-547	0	0	4	1,674	1,086
Total	148,423	151,688	34,219	3,458	-24,734	-69,912	47	147,535	8,068	87,592	714,617

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 9. PAD District IV Supply and Disposition of Crude Oil and Petroleum Products, February 1983
(Thousands of Barrels)

Commodity	Supply				Disposition				Ending Stocks		
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs		Exports	Products Supplied
Crude Oil (including lease condensate)	E 15,462	0	833	-1,969	-4,254	0	0	10,072	0	0	17,053
Natural Gas Liquids and LRGs	2,099	121	569	-64	0	-648	0	405	(s)	1,671	1,203
Liquefied Petroleum Gases	850	121	421	-28	0	149	0	278	(s)	1,235	584
Other Products ²	1,249	0	147	-36	0	-797	0	127	0	436	619
Other Liquids	39	0	0	-13	0	0	0	-305	0	331	5,626
Other Hydrocarbons and Alcohol	39	0	0	0	0	0	0	39	0	0	0
Unfinished Oils	0	0	0	63	0	0	0	-324	0	387	2,601
Motor Gasoline Blending Components	0	0	0	-76	0	0	0	-20	0	-56	3,025
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0
Finished Petroleum Products	18	10,241	7	-76	0	257	0	0	2	10,445	15,107
Finished Motor Gasoline	15	5,496	0	23	0	-13	0	0	0	5,521	6,443
Finished Leaded Motor Gasoline	6	3,425	0	76	0	-137	0	0	0	3,370	4,140
Finished Unleaded Motor Gasoline	9	2,071	0	-53	0	124	0	0	0	2,151	2,303
Finished Aviation Gasoline	0	17	0	-9	0	18	0	0	0	26	66
Naphtha-Type Jet Fuel	0	343	0	49	0	-127	0	0	0	265	332
Kerosene-Type Jet Fuel	0	506	0	-27	0	644	0	0	0	1,123	709
Kerosene	0	30	0	-9	0	0	0	0	0	21	47
Distillate Fuel Oil	0	2,535	0	100	0	-265	0	0	0	2,370	3,991
Residual Fuel Oil	0	193	6	97	0	0	0	0	0	296	445
Naphtha and Other Oils for Petro. Feed.	0	0	0	0	0	0	0	0	0	-1	0
Special Naphthas	0	2	1	2	0	0	0	0	0	5	7
Lubricants	0	9	(s)	14	0	0	0	0	0	23	79
Waxes	0	9	0	0	0	0	0	0	0	9	8
Petroleum Coke	0	232	0	-4	0	0	0	0	0	228	817
Asphalt and Road Oil	0	478	0	-312	0	0	0	0	0	165	2,162
Still Gas	0	385	0	0	0	0	0	0	0	385	0
Miscellaneous Products	3	6	0	0	0	0	0	0	0	9	1
Total	17,618	10,362	1,408	-2,122	-4,254	-391	0	10,172	2	12,448	38,989

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 10. PAD District V Supply and Disposition of Crude Oil and Petroleum Products, February 1983
(Thousands of Barrels)

Commodity	Supply					Disposition						
	Field Production	Refinery Production	Imports	Stock		Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
				Withdrawal (+) or Addition (-)								
Crude Oil (including lease condensate)	E 79,867	0	4,965	514	5	-19,585	24	56,471	7,338	1,930	85,336	
Natural Gas Liquids and LRGs	914	1,139	394	417	0	0	0	1,110	118	1,636	1,559	
Liquefied Petroleum Gases	556	1,139	394	298	0	0	0	763	118	1,506	1,443	
Other Products ²	358	0	0	119	0	0	0	347	0	130	116	
Other Liquids	340	0	35	-709	0	0	0	271	0	-605	36,208	
Other Hydrocarbons and Alcohol	340	0	0	1	0	0	0	341	0	0	5	
Unfinished Oils	0	0	9	-891	0	0	0	160	0	-1,042	27,582	
Motor Gasoline Blending Components	0	0	26	211	0	0	0	-200	0	437	8,572	
Aviation Gasoline Blending Components	0	0	0	-30	0	0	0	-30	0	0	49	
Finished Petroleum Products	0	60,394	1,994	11	0	3,619	0	0	6,511	59,507	61,336	
Finished Motor Gasoline	0	26,416	1,087	-752	0	1,730	0	0	5	28,476	23,300	
Finished Leaded Motor Gasoline	0	11,864	812	-943	0	1,097	0	0	5	12,826	11,109	
Finished Unleaded Motor Gasoline	0	14,552	275	191	0	633	0	0	0	15,651	12,191	
Finished Aviation Gasoline	0	120	0	98	0	268	0	0	0	218	594	
Naphtha-Type Jet Fuel	0	1,465	0	-50	0	210	0	0	0	1,683	1,855	
Kerosene-Type Jet Fuel	0	6,180	0	72	0	210	0	0	223	6,239	6,415	
Kerosene	0	371	1	-171	0	0	0	0	(s)	200	376	
Distillate Fuel Oil	0	9,585	147	1,217	0	609	0	0	2,216	9,342	12,844	
Residual Fuel Oil	0	8,134	676	-144	0	854	0	0	2,114	7,406	9,119	
Naphtha and Other Oils for Petro. Feed	0	544	22	98	0	0	0	0	2	662	500	
Special Naphthas	0	99	18	-16	0	0	0	0	2	100	232	
Lubricants	0	284	22	-146	0	-57	0	0	46	57	1,423	
Waxes	0	54	5	-4	0	0	0	0	4	51	57	
Petroleum Coke	0	2,934	0	23	0	0	0	0	1,895	1,062	2,517	
Asphalt and Road Oil	0	871	8	-220	0	0	0	0	3	656	1,818	
Still Gas	0	3,188	0	0	0	0	0	0	0	3,188	0	
Miscellaneous Products	0	149	8	6	0	5	0	0	2	166	286	
Total	81,121	61,533	7,388	233	5	-15,966	24	57,852	13,967	62,468	184,439	

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 11. Production of Crude Oil (Including Lease Condensate) by PAD District and State, for the Most Current Available Month,¹ December 1982
(Thousands of Barrels)

PAD District and State	Production	
	Total	Daily Average
PAD District I		
Florida	2,046	66
New York	E 71	2
Pennsylvania	E 317	10
Virginia	0	0
West Virginia	E 295	10
Adjustment 2	-22	-1
Total PAD District I	E 2,707	87
PAD District II		
Illinois	2,416	78
Indiana	E 401	13
Kansas	5,815	188
Kentucky	E 556	18
Michigan	2,415	78
Missouri	E 19	1
Nebraska	559	18
North Dakota	4,379	141
Ohio	E 1,151	37
Oklahoma	13,242	427
South Dakota	91	3
Tennessee	101	3
Adjustment 2	909	29
Total PAD District II	E 32,054	1,034
PAD District III		
Alabama	1,742	56
Arkansas	E 1,601	52
Louisiana		
Gulf Coast	37,314	1,204
Rest Of State	2,889	93
Total Louisiana	40,203	1,297
Mississippi	2,651	86
New Mexico		
Northwestern	566	18
Southeastern	4,730	153
Total New Mexico	5,296	171
Texas		
TRRC District 01	2,098	68
TRRC District 02	3,428	111
TRRC District 03	11,477	370
TRRC District 04	2,388	77
TRRC District 05	716	23
TRRC District 06, excluding East Texas	4,436	143
TRRC District 07B	2,811	91
TRRC District 07C	2,922	94
TRRC District 08	19,401	626
TRRC District 08A	19,589	632
TRRC District 09	3,202	103
TRRC District 10	1,845	60
East Texas	3,532	114
Total Texas	77,845	2,511
Adjustment 2	701	23
Total PAD District III	E 130,039	4,195

--Continued

PAD District and State	Production	
	Total	Daily Average
PAD District IV		
Colorado	E 2,387	77
Montana	2,562	83
Utah	E 2,014	65
Wyoming	E 10,192	329
Adjustment 2	318	10
Total PAD District IV	E 17,473	564
PAD District V		
Alaska		
South Alaska	2,273	73
North Slope	49,875	1,609
Adjustment for Alaska ²	-610	-20
Total Alaska	51,538	1,663
Arizona	25	1
California		
Central Coastal	6,467	209
East Central	20,646	666
North	17	1
South	6,776	219
Total California	33,906	1,094
Nevada	65	2
Adjustment for Arizona, California, and Nevada ²	653	21
Total PAD District V	86,187	2,780
United States Total	E 268,460	8,660

¹ Includes the following offshore production (thousands of barrels):

Alaska: 2,004;
California: Federal- 2,490, State- 3,363;
Louisiana: Federal- 24,759, State- 2,049;
Texas: Federal- 1,743, State- 136;
U.S. Total: 36,544.

² These adjustments are used to reconcile the national and PADD level sums of the State data with the independently estimated U.S. and Alaskan figures shown in the Summary Statistics portion of this issue and with the PADD level figures published in a previous issue. Final data at the State, PAD District and national levels will be published without adjustments in the Petroleum Supply Annual.

Sources: See Explanatory Notes on Data Collection and Estimation.
E = Estimated.

Table 12. Natural Gas Processing Plant Production of Petroleum Products by PAD District, February 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States			
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico		Total		
									Rocky Mt.	Dist. V West Coast							
Natural Gas Liquids	431	439	870	2	1,812	391	6,394	8,599	17,748	2,689	7,291	746	3,148	31,622	2,099	914	44,104
Natural Gasoline and Isopentane	43	29	72	0	58	66	1,188	1,312	1,889	2,138	1,163	108	175	5,473	314	340	7,511
Unfractionated Stream	31	119	150	2	655	73	-2,463	-1,733	8,944	-11,003	370	207	2,082	600	901	18	-64
Plant Condensate	0	0	0	0	0	23	37	120	223	187	25	-22	4	417	34	0	571
Liquefied Petroleum Gases	357	291	648	0	1,039	229	7,632	8,900	6,692	11,367	5,733	453	887	25,132	850	556	36,086
Ethane	74	152	226	0	429	0	990	1,419	750	2,719	2,110	37	86	5,702	27	0	7,374
Propane	174	94	268	0	445	143	2,606	3,194	2,370	3,464	1,859	142	376	8,211	541	330	12,544
Butane	93	29	122	0	80	77	1,054	1,211	1,309	1,728	775	156	204	4,172	276	180	5,961
Butane-Propane Mixtures	0	0	0	0	0	0	70	70	40	33	0	12	0	85	0	37	192
Ethane-Propane Mixtures	0	0	0	0	36	0	2,566	2,602	1,885	2,459	378	0	151	4,873	0	0	7,475
Isobutane	16	16	32	0	49	9	346	404	338	964	611	106	70	2,089	6	9	2,540
Finished Petroleum Products	63	0	63	0	2	0	7	9	166	4	7	11	3	191	18	0	281
Finished Motor Gasoline	63	0	63	0	0	0	0	0	0	0	4	0	0	4	15	0	82
Finished Leaded Motor Gasoline	39	0	39	0	0	0	0	0	0	0	4	0	0	4	6	0	49
Finished Unleaded Motor Gasoline	24	0	24	0	0	0	0	0	0	0	0	0	0	0	9	0	33
Finished Aviation Gasoline	0	0	0	0	0	0	0	0	31	0	0	0	0	31	0	0	31
Naphtha-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene	0	0	0	0	0	0	0	0	2	0	0	0	1	3	0	0	3
Distillate Fuel Oil	0	0	0	0	0	0	0	0	2	0	0	0	1	3	0	0	3
Special Naphthas	0	0	0	0	0	0	0	0	24	0	0	0	0	24	0	0	24
Miscellaneous Products	0	0	0	0	2	0	7	9	107	4	3	11	1	126	3	0	138
Total Production	494	439	933	2	1,814	391	6,401	8,608	17,914	2,693	7,298	757	3,151	31,813	2,117	914	44,385

¹ Production represents quantity of natural gas processing plant output less input to fractionating facilities.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 13. Refinery Input of Crude Oil and Petroleum Products by PAD District, February 1983
(Thousands of Barrels, Except Where Noted)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La., Gulf Coast	No. La., Ark.	New Mexico	Total		Rocky Mts.	PAD Dist. V West Coast
Crude Oil (including lease condensate)	25,239	1,850	27,089	1,265	45,930	6,512	18,103	71,810	12,871	72,718	39,829	4,715	2,195	132,328	10,072	56,471	297,770
Natural Gas Liquids																	
Natural Gasoline and Isopentane	19	0	19	0	311	108	863	1,282	900	1,776	479	62	66	3,283	76	347	5,007
Unfractionated Stream	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1
Plant Condensate	0	0	0	0	102	0	11	113	32	514	6	194	1	747	51	0	911
Liquefied Petroleum Gases	89	9	98	114	1,757	230	738	2,839	455	958	1,113*	80	58	2,664	278	763	6,642
Ethane	0	0	0	0	0	0	0	0	0	13	40	0	0	53	0	0	53
Propane	0	0	0	0	54	0	0	54	0	0	56	0	0	56	7	1	118
Butane	59	0	59	53	1,382	179	374	1,988	198	769	911	2	15	1,895	200	537	4,679
Butane-Propane Mixtures	0	0	0	0	0	0	0	0	2	56	2	0	22	82	50	0	132
Ethane-Propane Mixtures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Isobutane	30	9	39	61	321	51	364	797	255	120	104	78	21	578	21	225	1,660
Other Liquids																	
Other Hydrocarbons and Alcohol	102	0	102	0	298	0	15	313	0	487	230	0	0	717	39	341	1,512
Unfinished Oil (net)	3,481	84	3,565	0	571	22	-33	560	598	2,534	1,727	269	113	5,241	-324	160	9,202
Motor Gasoline Blending Components (net)	-50	-40	-90	8	-94	43	257	214	-497	810	2,213	13	-38	2,501	-20	-200	2,405
Aviation Gasoline Blending Components (net)	0	0	0	0	-37	0	4	-33	0	13	40	0	0	53	0	-30	-10
Total Input to Refineries	28,880	1,903	30,783	1,387	48,838	6,915	19,958	77,098	14,359	79,811	45,637	5,333	2,395	147,535	10,172	57,852	323,440
Crude Oil Distillation																	
Gross Input (daily average)	952	66	1,018	49	1,711	241	665	2,666	482	2,694	1,461	177	80	4,893	368	2,055	11,000
Operable Capacity (daily average)	1,471	174	1,645	66	2,342	295	854	3,557	611	4,085	2,882	297	104	7,980	561	3,080	16,823
Operating Ratio (percent) ¹	64.7	38.0	61.9	74.6	73.0	81.7	77.9	74.9	78.8	65.9	50.7	59.5	76.8	61.3	65.7	66.7	65.4
Crude Oil Qualities																	
Sulfur Content, Weighted Average (percent) .....	.94	.24	.89	.57	.89	1.64	.70	.91	.66	.95	.56	1.58	.31	.81	.98	1.00	.88
API Gravity, Weighted Average	30.31	40.96	31.08	37.11	32.33	25.22	36.16	32.75	38.34	30.41	34.95	31.61	39.71	32.78	32.32	25.43	31.20
Operable Capacity (daily average)																	
Operating	1,471	174	1,645	66	2,342	295	854	3,557	611	4,085	2,882	297	104	7,980	561	3,080	16,823
Idle	1,332	110	1,442	66	2,125	295	768	3,254	600	3,328	2,104	203	104	6,339	535	2,842	14,413
	139	64	203	0	218	0	86	303	11	758	778	94	0	1,641	25	238	2,411

¹ Represents gross input divided by operable capacity.
Note: Total may not equal sum of components due to independent rounding.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 14. Refinery Production of Petroleum Products by PAD District, February 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico		Total	Rocky Mt.	Dist. V West Coast
Liquefied Refinery Gases	1,212	12	1,224	30	1,435	202	522	2,189	208	1,909	676	64	69	2,926	121	1,139
For Petrochemical Feedstock Use	310	0	310	0	188	2	46	236	0	952	-49	14	0	917	-6	112
For Other Uses	902	12	914	30	1,247	200	476	1,953	208	957	725	50	69	2,009	127	1,027
Ethane	28	0	28	0	8	0	0	8	0	191	6	0	0	197	0	14
For Petrochemical Feedstock Use	0	0	0	0	0	0	0	0	0	155	6	0	0	161	0	161
For Other Uses	28	0	28	0	8	0	0	8	0	36	0	0	0	36	0	14
Propane	1,115	12	1,127	30	1,488	218	508	2,244	196	1,890	743	45	43	2,917	148	803
For Petrochemical Feedstock Use	310	0	310	0	189	0	46	235	0	774	-22	0	0	752	0	103
For Other Uses	805	12	817	30	1,299	218	462	2,009	196	1,116	765	45	43	2,165	148	700
Butane	69	0	69	0	-56	-16	14	-58	0	-208	94	17	-2	-99	-14	266
For Petrochemical Feedstock Use	0	0	0	0	0	2	0	2	0	22	-33	14	0	3	0	9
For Other Uses	69	0	69	0	-56	-18	14	-60	0	-230	127	3	-2	-102	-14	257
Butane-Propane Mixtures	0	0	0	0	-4	0	0	-4	12	35	-167	2	28	-90	-7	56
For Petrochemical Feedstock Use	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
For Other Uses	0	0	0	0	-4	0	0	-4	12	35	-167	2	28	-90	-7	56
Isobutane for Petro. Feed. Use	0	0	0	0	-1	0	0	-1	0	1	0	0	0	1	-6	0
Finished Motor Gasoline	14,917	685	15,602	898	29,736	4,077	11,937	46,648	7,600	36,763	22,370	1,816	955	69,504	5,496	26,416
Finished Leaded Motor Gasoline	5,677	325	6,002	585	12,892	2,081	7,022	22,580	3,774	14,763	9,564	1,101	536	29,738	3,425	11,864
Finished Unleaded Motor Gasoline	9,240	360	9,600	313	16,844	1,996	4,915	24,068	3,826	22,000	12,806	715	419	39,766	2,071	14,552
Finished Aviation Gasoline	-1	0	-1	0	134	0	47	181	-2	133	48	0	0	179	17	120
Naphtha-Type Jet Fuel	314	33	347	15	479	88	331	913	729	1,505	325	139	403	3,101	343	1,465
Kerosene-Type Jet Fuel	607	0	607	94	2,534	251	626	3,505	719	4,991	5,467	9	33	11,219	506	6,180
Kerosene	402	65	467	0	474	40	-85	429	70	1,203	1,163	3	17	2,456	30	371
Distillate Fuel Oil	5,963	418	6,381	202	8,314	1,440	4,418	14,374	2,789	15,315	6,677	1,413	745	26,939	2,535	9,585
Residual Fuel Oil	3,390	146	3,536	36	2,276	171	257	2,740	773	6,204	1,956	380	69	9,382	193	8,134
For Petrochemical Feed. Use	290	0	290	0	317	0	83	400	334	1,988	405	22	0	2,749	0	98
Other Oils > 400 Deg. For Petro. Feed. Use	9	0	9	0	60	0	1	61	176	3,147	3,391	20	0	6,734	0	446
Other Oils > 400 Deg. For Petro. Feed. Use	10	14	24	0	253	0	160	413	131	567	-18	181	0	861	2	99
Special Naphthas	115	289	404	0	450	0	277	727	10	1,377	610	284	0	2,281	9	284
Lubricants	22	53	75	0	6	0	24	30	9	146	47	68	0	270	9	54
Wax	1,014	12	1,026	22	1,908	314	682	2,926	265	2,120	1,428	149	8	3,970	232	2,934
Petroleum Coke	308	0	308	0	1,140	202	448	1,790	56	787	883	128	0	1,854	107	2,274
Marketable	706	12	718	22	768	112	234	1,136	209	1,333	545	21	8	2,116	125	660
Catalyst	574	37	611	76	830	437	676	2,019	305	380	493	684	82	1,944	478	871
Asphalt and Road Oil	1,435	82	1,517	56	2,062	272	804	3,194	376	3,755	1,505	183	47	5,866	385	3,188
Still Gas	21	0	21	0	2	0	0	2	5	323	11	0	0	339	18	53
For Petrochemical Feedstock Use	1,414	82	1,496	56	2,060	272	804	3,192	371	3,432	1,494	183	47	5,527	367	3,135
For Other Uses	309	22	331	2	60	23	53	138	70	599	599	39	0	1,307	6	149
Miscellaneous Products	9	1	10	0	2	0	13	15	0	0	341	0	0	341	3	21
Fuel Use	300	21	321	2	58	23	40	123	70	599	258	39	0	966	3	128
Non-Fuel Use																
Total Production	30,582	1,868	32,450	1,431	51,328	7,315	20,813	80,887	14,562	82,102	47,142	5,454	2,428	151,688	10,362	61,533
																336,920
Processing Gain(-) or Loss(+) ¹⁾	-1,702	35	-1,667	-44	-2,490	-400	-855	-3,789	-203	-2,291	-1,505	-121	-33	-4,153	-190	-3,681
																-13,480

¹ Represents the arithmetic difference between input and output.

Note: See Explanatory Notes on negative production.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 15. Percent Refinery Yield of Petroleum Products by PAD District,¹ February 1983

Table 15. Percent Refinery Yield of Petroleum Products by PAD District, February 1963																
Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okl., Kans., Mo.	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Rocky Mt.	Dist. V West Coast
Finished Motor Gasoline ²	51.4	37.0	50.5	61.3	58.8	56.6	55.6	49.8	42.8	44.1	29.4	37.6	43.3	52.0	44.4	47.9
Finished Aviation Gasoline ³ .....	.0	.0	.0	.0	.4	.0	.2	.0	.2	.0	.0	.0	.1	.2	.3	.2
Liquefied Refinery Gases	4.2	.6	4.0	2.4	3.1	3.1	2.9	1.5	2.5	1.6	1.3	3.0	2.1	1.2	2.0	2.5
Naphtha-Type Jet Fuel	1.1	1.7	1.1	1.2	1.0	1.3	1.8	5.4	2.0	.8	2.8	17.5	2.3	3.5	2.6	2.0
Kerosene-Type Jet Fuel	2.1	0	2.0	7.4	5.4	3.8	3.5	5.3	6.6	13.2	.2	1.4	8.2	5.2	10.9	7.2
Kerosene	1.4	3.4	1.5	0	1.0	.6	-.5	.5	1.6	2.8	.1	.7	1.8	.3	.7	1.2
Distillate Fuel Oil	20.8	21.6	20.8	16.0	17.9	22.0	24.4	19.9	20.7	16.1	28.4	32.3	19.6	26.0	16.9	19.5
Residual Fuel Oil	11.8	7.5	11.5	2.8	4.9	2.6	1.4	3.8	5.7	8.2	4.7	7.6	3.0	2.0	14.4	7.8
Naphtha < 400 Deg. F. Petro. Feed. Use	1.0	0	.9	0	.7	0	.5	.6	2.5	1.0	.4	0	2.0	0	.2	1.2
Other Oils > 400 Deg. F. Petro. Feed. Use .....	.0	0	.0	0	.1	0	.0	.1	1.3	4.2	8.2	.4	0	4.9	0	.8
Special Naphthas .....	.0	.7	.1	0	.5	0	.9	.6	1.0	.8	.0	0	.6	.0	.2	.5
Lubricants .....	.4	14.9	1.3	0	1.0	0	1.5	1.0	1.8	1.5	5.7	0	1.7	.1	.5	1.2
Wax .....	.1	2.7	.2	0	.0	0	.1	.0	.1	.2	.1	1.4	0	.1	.1	.1
Petroleum Coke	3.5	.6	3.3	1.7	4.1	4.8	3.8	4.0	2.0	2.8	3.4	3.0	2.9	2.4	5.2	3.6
Asphalt and Road Oil	2.0	1.9	2.0	6.0	1.8	6.7	3.7	2.8	2.3	.5	1.2	13.7	1.4	4.9	1.5	1.9
Still Gas	5.0	4.2	4.9	4.4	4.4	4.2	4.4	4.4	2.8	5.0	3.6	3.7	2.0	3.9	5.6	4.6
Miscellaneous Products	1.1	1.1	1.1	.2	.1	.4	.3	.2	.5	.8	1.4	.8	1.0	.1	.3	.6
Processing Gain(-) or Loss(+) ⁴	-5.9	1.8	-5.4	-3.5	-5.4	-6.1	-4.7	-5.2	-1.5	-3.0	-3.6	-2.4	-1.4	-1.9	-6.5	-4.4

¹ Based on crude oil input and net reruns of unfinished oils.² Based on total finished motor gasoline output plus net output of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and alcohol.³ Based on finished aviation gasoline output plus net output of aviation gasoline blending components.⁴ Represents the difference between Input and Production.

Note: Total may not equal sum of components due to independent rounding.

Note: See Explanatory Notes on negative production.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 16. Imports of Crude Oil and Petroleum Products by PAD District, February 1983
(Thousands of Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) ^{1 2}	20,460	8,554	28,681	833	4,965	63,492
Natural Gas Liquids	237	6,709	858	569	394	8,767
Natural Gasoline and Isopentane	0	0	0	0	0	0
Plant Condensate	93	0	0	147	0	240
Liquefied Petroleum Gases	144	6,709	858	421	394	8,527
Ethane	0	587	0	0	0	587
Propane	102	1,200	0	209	56	1,566
Butane	43	690	68	212	339	1,352
Butane-Propane Mixtures	0	0	791	0	0	791
Ethane-Propane Mixtures	0	4,232	0	0	0	4,232
Other Liquids ¹	2,273	360	2,565	0	35	5,233
Unfinished Oils ¹	1,921	130	1,816	0	9	3,876
Motor Gasoline Blending Components	352	230	748	0	26	1,356
Aviation Gasoline Blending Components	0	0	0	0	0	0
Finished Petroleum Products	20,698	1,029	2,115	7	1,994	25,843
Finished Motor Gasoline	2,645	244	(s)	0	1,087	3,976
Finished Leaded Motor Gasoline	983	233	(s)	0	812	2,028
Finished Unleaded Motor Gasoline	1,662	11	0	0	275	1,948
Finished Aviation Gasoline	209	0	0	0	0	209
Naphtha-Type Jet Fuel	0	0	0	0	0	0
Kerosene-Type Jet Fuel	227	0	0	0	0	227
Bonded Aircraft Fuel	0	0	0	0	0	0
Other	227	0	0	0	0	227
Kerosene	40	0	0	0	1	40
Distillate Fuel Oil	1,055	405	5	0	147	1,612
Bonded Ships Bunkers	0	0	0	0	0	0
Other	1,055	405	5	0	147	1,612
Residual Fuel Oil	16,214	253	541	6	676	17,691
Bonded Ships Bunkers	0	0	0	0	0	0
Other	16,214	253	541	6	676	17,691
Naphtha < 400 Deg. for Petro. Feed. Use	6	43	437	0	22	509
Other Oils > 400 Deg. for Petro. Feed. Use	0	0	0	0	0	0
Special Naphthas	83	63	291	1	18	456
Lubricants	107	6	72	(s)	22	208
Wax	5	3	9	0	5	22
Asphalt and Road Oil	105	3	0	0	8	117
Miscellaneous Products	1	8	759	0	8	776
Total Imports	43,668	16,551	34,219	1,408	7,388	103,335

¹ Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, February 1983
(Thousands of Barrels)

Source	Crude Oil 1	LPG	Unfin- ished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Kero- sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphtha	Other Prod- ucts 2	Total Prod- ucts	Total Petro- leum	Total (Daily Average)
All PAD Districts														
Arab OPEC														
Algeria	2,207	0	0	0	0	0	0	0	699	0	0	699	2,906	104
Saudi Arabia	5,987	0	0	0	0	0	0	0	0	0	(s)	(s)	5,987	214
United Arab Emirates	240	0	0	0	0	0	0	0	0	0	0	0	240	9
Subtotal Arab OPEC	8,434	0	0	0	0	0	0	0	699	0	(s)	699	9,133	326
Other OPEC														
Ecuador	677	0	0	0	0	0	0	0	117	0	0	117	795	28
Gabon	(s)	0	0	0	0	0	0	0	0	0	0	0	(s)	(s)
Indonesia	5,871	0	0	0	108	0	0	11	82	0	6	207	6,079	217
Nigeria	2,371	0	0	0	0	0	0	0	218	0	0	218	2,589	92
Venezuela	3,154	68	218	1,037	445	0	0	679	4,038	0	753	7,236	10,390	371
Subtotal Other OPEC	12,074	68	218	1,037	553	0	0	689	4,455	0	759	7,778	19,852	709
Other														
Angola	331	0	0	0	0	0	0	0	305	0	0	305	635	23
Australia	0	0	0	0	0	0	0	0	250	0	(s)	250	250	9
Bahamas	0	0	1,025	0	0	227	0	0	884	0	437	2,574	2,574	92
Brazil	308	0	0	0	0	0	0	0	745	0	8	753	1,061	38
Canada	6,411	7,668	139	256	264	0	7	603	730	162	327	10,156	16,567	592
Congo	0	0	0	0	0	0	0	0	348	0	0	348	348	12
Egypt	2,175	0	0	0	0	0	0	0	0	0	0	0	2,175	78
France	0	0	0	0	(s)	0	0	0	0	0	(s)	(s)	(s)	(s)
Mexico	18,558	791	0	0	0	0	0	14	825	2	15	1,646	20,204	722
Netherlands	0	0	0	15	480	0	0	0	0	0	0	495	495	18
Netherlands Antilles	0	0	1,308	0	0	0	0	0	3,607	0	105	5,021	5,021	179
Norway	816	0	0	0	0	0	0	0	0	0	0	0	816	29
Oman	1,571	0	0	0	0	0	0	0	0	0	0	0	1,571	56
People's Republic of China	0	0	0	0	713	0	0	0	0	0	0	713	713	25
Peru	0	0	0	0	16	0	0	0	269	0	0	284	284	10
Puerto Rico	0	0	274	27	546	0	0	179	0	275	105	1,405	1,405	50
Spain	0	0	0	0	0	0	0	0	1	0	0	1	1	(s)
Trinidad and Tobago	2,263	0	0	0	0	0	0	0	0	0	0	0	2,263	81
Tunisia	(s)	0	0	0	0	0	0	0	0	0	0	0	(s)	(s)
United Kingdom	4,905	0	0	0	174	0	0	0	339	0	(s)	512	5,417	193
Virgin Islands	0	0	360	0	1,093	0	33	0	3,691	0	208	5,385	5,385	192
Zaire	830	0	0	0	0	0	0	0	0	0	0	0	830	30
Other Western Hemisphere	144	0	0	22	0	0	0	0	0	18	0	39	184	7
Other Eastern Hemisphere	4,671	(s)	554	0	137	0	0	128	544	0	115	1,478	6,148	220
Subtotal Other	42,984	8,459	3,659	320	3,423	227	40	923	12,537	456	1,321	31,365	74,349	2,655
Total Imports	63,492	8,527	3,876	1,356	3,976	227	40	1,612	17,691	456	2,080	39,843	103,335	3,691

See footnotes at end of table.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, February 1983
(Thousands of Barrels)
(continued)

Source	Crude Oil 1	LPG	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distill. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Products 2	Total Products	Total Petroleum	Total (Daily Average)
PAD District I														
Arab OPEC														
Algeria	1,955	0	0	0	0	0	0	0	699	0	0	699	2,655	95
Saudi Arabia	2,173	0	0	0	0	0	0	0	0	0	(\$)	(\$)	2,173	78
Subtotal Arab OPEC	4,128	0	0	0	0	0	0	0	699	0	(\$)	699	4,827	172
Other OPEC														
Ecuador	355	0	0	0	0	0	0	0	117	0	0	117	472	17
Indonesia	1,131	0	0	0	0	0	0	0	0	0	0	0	1,131	40
Nigeria	1,112	0	0	0	0	0	0	0	0	0	0	0	1,112	40
Venezuela	1,969	0	0	325	445	0	0	679	4,038	0	0	5,487	7,456	266
Subtotal Other OPEC	4,566	0	0	325	445	0	0	679	4,155	0	0	5,604	10,170	363
Other														
Angola	331	0	0	0	0	0	0	0	305	0	0	305	635	23
Australia	0	0	0	0	0	0	0	0	250	0	0	250	250	9
Bahamas	0	0	203	0	0	227	0	0	884	0	0	1,315	1,315	47
Brazil	308	0	0	0	0	0	0	0	745	0	0	745	1,052	38
Canada	0	144	0	0	81	0	6	198	471	13	107	1,020	1,020	36
Congo	0	0	0	0	0	0	0	0	348	0	0	348	348	12
France	0	0	0	0	0	0	0	0	0	0	(\$)	(\$)	(\$)	(s)
Mexico	3,197	0	0	0	0	0	0	0	502	0	0	502	3,699	132
Netherlands	0	0	0	0	480	0	0	0	0	0	0	480	480	17
Netherlands Antilles	0	0	1,308	0	0	0	0	0	3,389	0	105	4,803	4,803	172
Oman	1,571	0	0	0	0	0	0	0	0	0	0	0	1,571	56
Peru	0	0	0	0	0	0	0	0	201	0	0	201	201	7
Puerto Rico	0	0	274	27	546	0	0	179	0	71	105	1,201	1,201	43
Trinidad and Tobago	407	0	0	0	0	0	0	0	0	0	0	0	407	15
Tunisia	(\$)	0	0	0	0	0	0	0	0	0	0	0	(\$)	(s)
United Kingdom	3,465	0	0	0	1,093	0	33	0	339	0	(\$)	339	3,804	136
Virgin Islands	0	0	136	0	0	0	0	0	3,689	0	208	5,160	5,160	184
Zaire	358	0	0	0	0	0	0	0	0	0	0	0	358	13
Other Eastern Hemisphere	2,128	(\$)	0	0	0	0	0	0	239	0	(\$)	239	2,367	85
Subtotal Other	11,765	144	1,921	27	2,200	227	40	376	11,360	83	526	16,906	28,671	1,024
Total Imports	20,460	144	1,921	352	2,645	227	40	1,055	16,214	83	526	23,209	43,668	1,560
PAD District II														
Other OPEC														
Venezuela	317	0	0	0	0	0	0	0	0	0	0	0	317	11
Subtotal Other OPEC	317	0	0	0	0	0	0	0	0	0	0	0	317	11
Other														
Canada	5,025	6,709	130	230	71	0	0	405	253	63	63	7,924	12,949	462
Egypt	447	0	0	0	0	0	0	0	0	0	0	0	447	16
France	0	0	0	0	0	0	0	0	0	0	(\$)	(\$)	(\$)	(s)
Mexico	1,812	0	0	0	0	0	0	0	0	0	0	0	1,812	65
United Kingdom	808	0	0	0	174	0	0	0	0	0	0	174	982	35

See footnotes at end of table.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, February 1983
(Thousands of Barrels)
(continued)

Source	Crude Oil 1	LPG	Unfin- ished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Kero- sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod- ucts 2	Total Prod- ucts	Total Petro- leum	Total (Daily Average)
PAD District II														
Other Western Hemisphere	144	0	0	0	0	0	0	0	0	0	0	0	144	5
Other Eastern Hemisphere	0	0	0	0	0	0	0	0	0	0	0	0	0	(s)
Subtotal Other	8,237	6,709	130	230	244	0	0	405	253	63	63	8,097	16,334	583
Total Imports	8,554	6,709	130	230	244	0	0	405	253	63	63	8,097	16,651	595
PAD District III														
Arab OPEC														
Algeria	252	0	0	0	0	0	0	0	0	0	0	0	252	9
Saudi Arabia	3,815	0	0	0	0	0	0	0	0	0	0	0	3,815	136
United Arab Emirates	240	0	0	0	0	0	0	0	0	0	0	0	240	9
Subtotal Arab OPEC	4,306	0	0	0	0	0	0	0	0	0	0	0	4,306	154
Other OPEC														
Ecuador	323	0	0	0	0	0	0	0	0	0	0	0	323	12
Gabon	(s)	0	0	0	0	0	0	0	0	0	0	0	(s)	(s)
Indonesia	330	0	0	0	0	0	0	0	0	0	6	6	336	12
Nigeria	1,259	0	0	0	0	0	0	0	218	0	0	218	1,477	53
Venezuela	868	68	218	712	0	0	0	0	0	0	753	1,750	2,617	93
Subtotal Other OPEC	2,780	68	218	712	0	0	0	0	218	0	759	1,974	4,753	170
Other														
Bahamas	0	0	822	0	0	0	0	0	0	0	437	1,259	1,259	45
Brazil	0	0	0	0	0	0	0	0	(s)	0	8	8	8	(s)
Canada	0	0	0	0	0	0	0	0	0	67	0	67	67	2
Egypt	1,728	0	0	0	0	0	0	0	0	0	0	0	1,728	62
Mexico	13,549	791	0	0	(s)	0	0	5	323	2	2	1,123	14,671	524
Netherlands	0	0	0	15	0	0	0	0	0	0	0	15	15	1
Norway	816	0	0	0	0	0	0	0	0	0	0	0	816	29
Puerto Rico	0	0	0	0	0	0	0	0	0	204	0	204	204	7
Spain	0	0	0	0	0	0	0	0	1	0	0	1	1	(s)
Trinidad and Tobago	1,856	0	0	0	0	0	0	0	0	0	0	0	1,856	66
United Kingdom	631	0	0	0	0	0	0	0	0	0	0	0	631	23
Virgin Islands	0	0	223	0	0	0	0	0	0	0	0	223	223	8
Zaire	472	0	0	0	0	0	0	0	0	0	0	0	472	17
Other Western Hemisphere	0	0	0	22	0	0	0	0	0	18	0	39	39	1
Other Eastern Hemisphere	2,543	0	554	0	0	0	0	0	0	0	71	624	3,167	113
Subtotal Other	21,596	791	1,598	37	(s)	0	0	5	324	291	518	3,564	25,160	899
Total Imports	28,681	858	1,816	748	(s)	0	0	5	541	291	1,277	5,538	34,219	1,222

See footnotes at end of table.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, February 1983
(Thousands of Barrels)
(continued)

Source	Crude Oil 1	LPG	Unfin- ished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Kero- sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod- ucts 2	Total Prod- ucts	Total Petro- leum	Total (Daily Average)
PAD District IV														
Other														
Canada	833	421	0	0	0	0	0	0	6	1	147	575	1,408	50
Subtotal Other	833	421	0	0	0	0	0	0	6	1	147	575	1,408	50
Total Imports	833	421	0	0	0	0	0	0	6	1	147	575	1,408	50
PAD District V														
Other OPEC														
Indonesia	4,411	0	0	0	108	0	0	11	82	0	0	201	4,612	165
Subtotal Other OPEC	4,411	0	0	0	108	0	0	11	82	0	0	201	4,612	165
Other														
Australia	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Canada	554	394	9	26	112	0	1	0	0	18	9	569	1,123	40
France	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Mexico	0	0	0	0	0	0	0	9	0	0	13	21	21	1
Netherlands Antilles	0	0	0	0	0	0	0	0	218	0	0	218	218	8
People's Republic of China	0	0	0	0	713	0	0	0	0	0	0	713	713	25
Peru	0	0	0	0	16	0	0	0	68	0	0	84	84	3
Virgin Islands	0	0	0	0	0	0	0	0	2	0	0	2	2	(s)
Other Eastern Hemisphere	0	(s)	0	0	137	0	0	128	306	0	44	614	614	22
Subtotal Other	554	394	9	26	979	0	1	136	594	18	65	2,222	2,776	99
Total Imports	4,965	394	9	26	1,087	0	1	147	676	18	65	2,423	7,388	264

1 Includes crude oil imported for storage in the Strategic Petroleum Reserve.

2 Includes aviation gasoline, waxes, asphalt, lubricants, natural gasoline, isopentane, plant condensate, naphthas less than 400 degrees F, other oils greater than 400 degrees F and miscellaneous products.

(s) Less than 500 barrels or less than 500 barrels per day.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 18. Exports of Crude Oil and Petroleum Products by PAD District, February 1983
(Thousands of Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) ¹	0	0	0	0	7,338	7,338
Liquefied Petroleum Gases	217	10	1,772	(s)	118	2,117
Ethane	0	0	(s)	0	0	(s)
Propane	203	5	1,244	(s)	47	1,499
Butane	14	5	528	(s)	71	618
Butane-Propane Mixtures	0	0	0	0	0	0
Finished Motor Gasoline	1	0	(s)	0	5	6
Naphtha-Type Jet Fuel	0	0	0	0	0	0
Kerosene-Type Jet Fuel	0	0	(s)	0	223	223
Kerosene	0	0	(s)	0	(s)	(s)
Distillate Fuel Oil	618	(s)	97	0	2,216	2,931
Residual Fuel Oil	434	0	2,800	0	2,114	5,348
Naphtha < 400 Deg. for Petrochem. Feedstock	46	5	46	1	1	99
Other Oils > 400 Deg. for Petrochem. Feedstock	0	15	600	0	1	616
Special Naphthas	232	4	11	2	2	248
Lubricants	103	12	212	1	46	374
Wax	6	(s)	11	0	4	20
Petroleum Coke	372	62	2,515	0	1,895	4,844
Asphalt	41	1	(s)	1	3	45
Miscellaneous Products	11	1	4	0	2	19
Total Product Exports	2,082	111	8,068	2	6,629	16,892
Total Exports	2,082	111	8,068	2	13,967	24,230

¹ Exports of crude oil are prohibited by law. However, some crude oil is exchanged with Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical Tracking Systems count these exchanges and shipments as imports and exports.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 19. Exports of Crude Oil and Petroleum Products by Destination, February 1983
(Thousands of Barrels)

Destination	Crude Oil 1	LPG	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubri-cants	Wax	Petro-leum Coke	Asphalt	Other	Total	Total (Daily Average)
Argentina	0	(s)	0	0	0	0	(s)	7	1	3	(s)	147	158	6
Australia	0	(s)	0	0	0	0	(s)	2	(s)	163	(s)	2	167	6
Bahamas	0	(s)	1	0	0	177	(s)	2	0	0	(s)	0	180	6
Bahrain	0	0	0	0	0	0	(s)	(s)	0	0	(s)	0	1	(s)
Belgium & Luxembourg	0	(s)	0	0	0	0	(s)	2	(s)	599	(s)	(s)	602	22
Brazil	0	0	(s)	0	0	0	(s)	(s)	0	0	(s)	0	(s)	(s)
Cameroon	0	0	0	0	0	0	(s)	(s)	0	30	(s)	0	30	1
Canada	0	13	0	0	(s)	897	3	31	4	126	4	38	1,116	40
Chile	0	1	0	0	0	0	1	17	0	(s)	0	(s)	19	1
China (Taiwan)	0	(s)	0	0	0	0	(s)	6	(s)	(s)	0	1	7	(s)
Colombia	0	(s)	0	0	0	0	(s)	2	0	0	0	1	4	(s)
Costa Rica	0	0	0	0	0	0	0	3	(s)	0	0	(s)	4	(s)
Denmark	0	0	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
Dominican Republic	0	2	0	0	0	0	(s)	(s)	0	0	0	(s)	2	(s)
Ecuador	0	104	0	0	0	0	(s)	(s)	(s)	150	0	1	106	4
Egypt	0	(s)	0	0	0	0	0	(s)	0	0	0	(s)	150	5
El Salvador	0	(s)	0	0	0	0	0	2	0	0	0	1	2	(s)
Finland	0	0	0	0	0	0	0	(s)	(s)	0	0	222	537	19
France	0	309	0	0	0	0	0	1	0	4	0	0	(s)	(s)
French Pacific Isl.	0	0	0	0	0	0	0	(s)	0	0	0	0	16	1
Ghana	0	0	0	0	0	0	0	0	0	16	0	(s)	3	(s)
Greece	0	2	0	0	0	0	0	1	0	0	0	(s)	41	1
Guatemala	0	37	0	0	0	0	0	3	0	0	0	(s)	0	0
Guinea	0	0	0	0	0	0	0	0	0	0	0	(s)	10	(s)
Honduras	0	(s)	(s)	0	0	471	1	8	0	0	0	(s)	0	0
Hong Kong	0	1	0	0	0	0	0	2	(s)	0	0	0	287	10
India	0	0	0	0	0	0	0	19	(s)	0	0	(s)	(s)	(s)
Indonesia	0	0	0	0	268	0	0	(s)	0	0	0	(s)	1	(s)
Iran	0	0	0	0	0	0	0	(s)	0	0	0	(s)	703	25
Israel	0	(s)	0	0	0	0	3	(s)	(s)	246	0	130	0	0
Italy	0	324	0	0	0	0	0	0	(s)	0	0	0	0	0
Ivory Coast	0	0	0	0	0	0	0	0	0	0	0	0	13	(s)
Jamaica	0	12	0	0	0	0	0	(s)	0	0	0	(s)	3,074	110
Japan	0	516	0	0	557	23	0	2	0	1,957	0	17	(s)	(s)
Jordan	0	0	0	0	0	0	0	(s)	0	0	0	0	181	6
Korea, Republic of	0	0	0	0	63	116	(s)	1	(s)	1	0	1	2	(s)
Kuwait	0	0	0	0	0	0	(s)	2	0	0	0	(s)	191	7
Lebanon	0	0	0	0	0	0	0	0	0	0	0	(s)	1	(s)
Liberia	0	(s)	0	0	0	190	0	0	0	0	(s)	0	0	(s)
Malaysia	0	0	0	0	(s)	0	1	77	(s)	18	0	7	751	27
Mexico	0	618	5	23	315	653	5	15	(s)	371	0	79	1,534	55
Netherlands	0	95	0	0	1	320	0	2	0	0	0	0	322	12
Netherlands Antilles	0	0	0	0	0	0	(s)	1	(s)	118	0	0	118	4
New Zealand	0	0	0	0	0	0	0	21	0	0	0	0	24	1
Nicaragua	0	(s)	0	0	0	0	3	(s)	0	0	40	(s)	40	1
Nigeria	0	0	0	0	0	0	0	0	0	0	0	1	1	(s)
Norway	0	(s)	0	0	0	0	0	(s)	(s)	0	0	0	(s)	(s)
Pacific Trust Terr.	0	0	0	0	0	0	0	1	0	0	0	0	74	3
Panama	0	(s)	15	0	0	57	(s)	3	(s)	0	0	(s)	27	1
Peru	0	24	0	0	0	0	0	0	(s)	0	0	0	1	(s)
Philippines	0	0	0	0	(s)	0	0	0	(s)	0	0	0	1	64
Puerto Rico	1,370	25	0	0	0	374	(s)	12	(s)	0	0	6	1,788	4
Rep. of South Africa	0	0	0	0	0	0	0	(s)	(s)	99	(s)	2	107	4

See footnotes at end of table.

Table 19. Exports of Crude Oil and Petroleum Products by Destination, February 1983
(Thousands of Barrels)
(continued)

Destination	Crude Oil ¹	LPG	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubricants	Wax	Petroleum Coke	Asphalt	Other	Total	Total (Daily Average)
Saudi Arabia	0	1	0	0	(s)	0	(s)	15	0	3	(s)	4	23	1
Singapore	0	(s)	0	200	1,068	1,336	0	4	(s)	16	(s)	1	2,626	94
Spain	0	1	0	0	260	0	0	(s)	0	694	0	50	1,006	36
Sumnam	0	0	0	0	0	0	(s)	1	0	0	0	(s)	1	(s)
Sweden	0	0	0	0	0	0	230	2	(s)	0	0	1	233	8
Switzerland	0	0	0	0	398	0	0	(s)	(s)	0	0	(s)	399	14
Thailand	0	0	0	0	0	0	0	5	(s)	0	(s)	(s)	6	(s)
Trinidad and Tobago	0	10	0	0	0	0	0	1	0	0	0	(s)	11	(s)
Turkey	0	0	0	0	0	194	0	0	0	0	0	0	194	7
United Arab Emirates	0	0	0	0	0	0	0	4	0	0	0	(s)	4	(s)
United Kingdom	0	1	(s)	(s)	1	0	0	18	(s)	27	0	3	51	2
U.S.S.R.	0	0	0	0	0	0	0	65	0	0	0	7	71	3
Uruguay	0	0	0	0	0	0	0	(s)	(s)	0	0	(s)	(s)	(s)
Venezuela	0	0	0	0	0	0	0	(s)	(s)	61	(s)	1	66	2
Virgin Islands	5,024	3	0	0	0	0	(s)	0	0	0	0	0	5,334	190
West Germany	0	0	0	0	0	310	0	(s)	1	71	0	2	76	3
Yugoslavia	0	0	0	0	0	0	0	2	0	72	0	0	73	3
Other	944	2	0	0	(s)	231	0	(s)	0	0	0	3	1,185	42
Total	7,338	2,117	6	223	2,931	5,348	248	374	20	4,844	45	734	24,230	865

¹ Exports of crude oil are prohibited under normal circumstances. Some crude oil is shipped to Canada in exchange on a barrel-for-barrel basis. Shipments of crude oil to Puerto Rico, the Virgin Islands, Guam and the Hawaiian Foreign Trade Zone are not prohibited because these territories are U.S. possessions.
(s) Less than 500 barrels or less than 500 barrels per day.
Note: Total may not equal sum of components due to independent rounding.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, February 1983
(Thousands of Barrels)

Commodity	PAD District I		PAD District II				PAD District III				PAD District IV		United States				
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Total		Rocky Mt.	Dist. V					
									Texas Inland	Texas Gulf Coast				La. Gulf Coast	No. La., Ark.	New Mexico	
Crude Oil (incl. lease condensate)																	
Refinery	--	--	15,504	--	--	--	--	15,401	--	--	--	--	43,952	2,711	24,925	102,493	
Tank Farms and Pipelines	--	--	1,671	--	--	--	--	66,861	--	--	--	--	100,959	12,899	28,588	210,978	
Leases	--	--	65	--	--	--	--	1,718	--	--	--	--	17,500	1,443	1,952	22,678	
Strategic Petroleum Reserve ¹	--	--	0	--	--	--	--	0	--	--	--	--	306,133	0	0	306,133	
Alaskan In-Transit	--	--	0	--	--	--	--	0	--	--	--	--	0	0	29,871	29,871	
Total	--	--	17,240	--	--	--	--	83,980	--	--	--	--	468,544	17,053	85,336	672,153	
Total Stocks, All Oils (excl. Crude Oil)																	
Refinery	37,789	3,314	41,103	742	45,510	7,672	19,827	73,751	10,623	71,148	44,338	5,331	1,588	133,028	15,374	70,304	333,560
Bulk Terminal	--	--	120,379	--	--	--	--	92,874	--	--	--	--	--	68,924	3,249	24,785	310,211
Pipeline	--	--	27,864	--	--	--	--	35,147	--	--	--	--	--	39,685	3,047	3,935	109,678
Natural Gas Processing Plant	146	47	193	0	223	59	1,023	1,305	1,817	1,569	753	83	214	4,436	266	79	6,279
Total	--	--	189,539	--	--	--	--	203,077	--	--	--	--	--	246,073	21,936	99,103	759,728
Natural Gasoline and Isopentane																	
Refinery	4	0	4	0	33	103	157	293	141	148	181	0	10	480	12	89	878
Bulk Terminal	--	--	11	--	--	--	--	1,609	--	--	--	--	--	1,744	1	0	3,365
Pipeline	--	--	0	--	--	--	--	310	--	--	--	--	--	816	141	5	1,272
Natural Gas Processing Plant	4	10	14	0	27	13	115	155	318	178	184	18	15	713	54	20	956
Total	--	--	29	--	--	--	--	2,367	--	--	--	--	--	3,753	208	114	6,471
Unfractionated Stream																	
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulk Terminal	--	--	0	--	--	--	--	441	--	--	--	--	--	1,049	0	0	1,490
Pipeline	--	--	0	--	--	--	--	172	--	--	--	--	--	1,171	369	0	1,712
Natural Gas Processing Plant	0	0	0	0	97	2	343	442	135	1,212	81	2	27	1,457	28	2	1,929
Total	--	--	0	--	--	--	--	1,055	--	--	--	--	--	3,677	397	2	5,131
Plant Condensate																	
Refinery	0	0	0	0	2	0	0	2	12	43	0	73	0	128	0	0	130
Bulk Terminal	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	0	0
Pipeline	--	--	0	--	--	--	--	0	--	--	--	--	--	1,152	0	0	1,152
Natural Gas Processing Plant	0	0	0	0	2	3	3	8	32	20	10	12	0	74	14	0	96
Total	--	--	0	--	--	--	--	10	--	--	--	--	--	1,354	14	0	1,378
Liquefied Petroleum Gases																	
Refinery	588	11	599	81	1,282	108	550	2,021	201	1,675	1,915	18	13	3,822	346	932	7,720
Bulk Terminal	--	--	1,943	--	--	--	--	18,228	--	--	--	--	--	37,208	57	454	57,890
Pipeline	--	--	2,510	--	--	--	--	6,571	--	--	--	--	--	3,507	35	0	12,623
Natural Gas Processing Plant	120	37	157	0	96	41	562	699	1,067	156	478	50	172	1,923	146	57	2,982
Total	--	--	5,209	--	--	--	--	27,519	--	--	--	--	--	46,460	584	1,443	81,215
Ethane																	
Refinery	0	0	0	0	7	0	0	7	0	300	0	0	0	300	0	0	307
Bulk Terminal	--	--	0	--	--	--	--	946	--	--	--	--	--	2,455	0	0	3,401
Pipeline	--	--	0	--	--	--	--	1,194	--	--	--	--	--	279	0	0	1,473

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, February 1963
(Thousands of Barrels) (continued)

Commodity	PAD District I		PAD District II				PAD District III					Total	PAD Dist. IV	United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast				No. La., Ark.	New Mexico
Ethane																
Natural Gas Processing Plant	0	0	0	0	0	25	0	19	44	0	1	0	1	0	2	47
Total	—	—	0	—	—	—	—	—	2,191	—	—	—	—	—	3,036	5,228
Propane for Petrochemical Feedstock Use																
Refinery	38	0	38	0	131	0	2	133	0	5	224	0	0	0	229	400
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	—	0	0
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	—	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	38	—	—	—	—	133	—	—	—	—	—	—	229	400
Propane For Other Uses																
Refinery	512	5	517	2	746	35	236	1,019	91	294	871	4	2	2	1,262	3,197
Bulk Terminal	—	—	1,662	—	—	—	—	10,574	—	—	—	—	—	—	17,759	30,151
Pipeline	—	—	2,390	—	—	—	—	3,190	—	—	—	—	—	—	1,224	6,804
Natural Gas Processing Plant	75	36	111	0	58	28	212	298	358	33	372	20	88	111	871	1,430
Total	—	—	4,680	—	—	—	—	15,061	—	—	—	—	—	—	21,116	41,582
Butane For Petro. Feed Use																
Refinery	0	0	0	0	0	10	0	10	0	11	0	2	0	0	13	25
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	—	0	0
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	—	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	0	—	—	—	—	10	—	—	—	—	—	—	13	25
Butane For Other Uses																
Refinery	38	0	38	49	285	50	177	561	46	554	387	3	3	3	993	2,307
Bulk Terminal	—	—	193	—	—	—	—	1,721	—	—	—	—	—	—	6,009	8,134
Pipeline	—	—	120	—	—	—	—	1,113	—	—	—	—	—	—	381	1,614
Natural Gas Processing Plant	42	0	42	0	10	11	190	211	323	54	74	18	44	513	811	12,866
Total	—	—	393	—	—	—	—	3,606	—	—	—	—	—	—	7,896	12,866
Butane-Propane Mixtures For Petro. Feed Use																
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	0	—	—	—	—	0	—	—	—	—	—	—	0	0
Butane-Propane Mixtures For Other Uses																
Refinery	0	0	0	0	1	0	0	1	2	9	8	0	2	2	21	138
Bulk Terminal	—	—	0	—	—	—	—	328	—	—	—	—	—	—	18	396
Pipeline	—	—	0	—	—	—	—	18	—	—	—	—	—	—	654	672
Natural Gas Processing Plant	0	0	0	0	0	0	1	1	4	2	0	1	0	7	12	12
Total	—	—	0	—	—	—	—	348	—	—	—	—	—	—	700	1,218
Ethane-Propane Mixtures																
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulk Terminal	—	—	64	—	—	—	—	3,417	—	—	—	—	—	—	7,576	11,057
Pipeline	—	—	0	—	—	—	—	559	—	—	—	—	—	—	718	1,312
Natural Gas Processing Plant	0	0	0	0	0	0	123	123	327	0	0	0	26	353	476	12,845
Total	—	—	64	—	—	—	—	4,099	—	—	—	—	—	—	8,647	12,845

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, February 1983
(Thousands of Barrels) (continued)

(Thousands of Barrels) (continued)																			
Commodity	PAD District I		Total	PAD District II				Total	PAD District III				Total	PAD District IV		United States			
	East Coast	Appalachian #1		Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okl., Kans., Mo.		Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.		New Mexico	Rocky Mt.		Dist. V West Coast		
Isobutane																			
Refinery	0	6	6	112	13	135	290	62	502	425	9	6	1,004	39	7	1,346			
Bulk Terminal	--	--	24	--	--	--	1,242	--	--	--	--	--	3,391	0	94	4,751			
Pipeline	--	--	0	--	--	--	497	--	--	--	--	--	251	0	0	748			
Natural Gas Processing Plant	3	1	4	0	3	2	17	22	55	66	32	10	177	1	2	206			
Total	--	--	34	--	--	--	2,051	--	--	--	--	--	4,823	40	103	7,051			
Other Hydrocarbons and Alcohol																			
Refinery	52	0	52	113	0	0	113	1	88	23	0	0	112	0	5	282			
Total	--	--	52	--	--	--	113	--	--	--	--	--	112	0	5	282			
Unfinished Oils																			
Refinery	2,599	189	2,788	54	2,519	113	3,964	888	9,175	5,896	159	66	16,184	442	4,554	27,932			
Naphthas and Lighter	1,982	20	2,002	0	2,038	6	2,403	430	5,724	1,392	34	17	7,597	403	4,474	16,879			
Kerosene and Lighter Gas Oils	5,856	315	6,171	51	4,013	260	1,248	1,316	9,741	6,915	342	95	18,409	901	13,632	44,685			
Heavy Gas Oils	1,787	285	2,072	2	2,857	10	1,614	4,483	3,458	2,720	54	0	6,485	855	4,922	18,817			
Residuum	12,224	809	13,033	107	11,427	389	16,422	2,887	28,098	16,923	589	178	48,675	2,601	27,582	108,313			
Total	4,921	160	5,081	24	6,652	899	10,011	1,522	8,153	4,987	137	245	15,044	3,024	8,560	41,720			
Motor Gasoline Blending Components																			
Refinery	--	--	118	--	--	--	96	--	--	--	--	--	1,329	1	12	1,556			
Bulk Terminal	--	--	0	--	--	--	354	--	--	--	--	--	157	0	0	511			
Pipeline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Natural Gas Processing Plant	--	--	5,199	--	--	--	10,461	--	--	--	--	--	16,530	3,025	8,572	43,787			
Total	--	--	5,199	--	--	--	10,461	--	--	--	--	--	16,530	3,025	8,572	43,787			
Aviation Gasoline Blending Components																			
Refinery	0	0	0	164	0	8	172	69	73	178	0	0	320	0	49	541			
Bulk Terminal	--	--	0	--	--	--	0	--	--	--	--	--	0	0	0	0			
Pipeline	--	--	0	--	--	--	0	--	--	--	--	--	0	0	0	0			
Natural Gas Processing Plant	0	0	0	0	0	0	172	0	0	0	0	0	320	0	49	541			
Total	--	--	0	--	--	--	172	--	--	--	--	--	320	0	49	541			
Total Finished Motor Gasoline																			
Refinery	5,704	295	5,999	97	7,777	1,933	13,808	2,228	8,721	5,249	783	215	17,196	2,931	9,249	49,183			
Bulk Terminal	--	--	40,673	--	--	--	36,032	--	--	--	--	--	12,972	1,931	11,807	103,415			
Pipeline	--	--	14,117	--	--	--	16,944	--	--	--	--	--	19,900	1,557	2,244	54,762			
Natural Gas Processing Plant	22	0	22	0	0	0	66,784	0	0	0	0	0	0	24	0	46			
Total	--	--	60,811	--	--	--	66,784	--	--	--	--	--	50,068	6,443	23,300	207,406			
Finished Leaded Motor Gasoline																			
Refinery	2,371	164	2,535	68	3,852	1,162	7,392	1,113	4,077	2,648	454	111	8,403	1,765	3,783	23,878			
Bulk Terminal	--	--	19,093	--	--	--	18,906	--	--	--	--	--	6,331	1,281	6,145	51,756			
Pipeline	--	--	8,126	--	--	--	8,654	--	--	--	--	--	9,770	1,076	1,181	28,807			
Natural Gas Processing Plant	14	0	14	0	0	0	34,952	0	0	0	0	0	0	18	0	32			
Total	--	--	29,768	--	--	--	34,952	--	--	--	--	--	24,504	4,140	11,109	104,473			

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, February 1983
(Thousands of Barrels) (continued)

Commodity	PAD District I		PAD District II				PAD District III				Total	PAD District IV		United States			
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast		La. Gulf Coast	No. La., Ark.		New Mexico		
											Rocky Mt.			West Coast			
Finished Unleaded Motor Gasoline																	
Refinery	3,333	131	3,464	29	3,925	771	1,691	6,416	1,115	4,644	2,601	329	104	8,793	1,166	5,466	25,305
Bulk Terminal	--	--	21,580	--	--	--	--	17,126	--	--	--	--	--	6,641	650	5,662	51,659
Pipeline	--	--	5,991	--	--	--	--	8,290	--	--	--	--	--	10,130	481	1,063	25,955
Natural Gas Processing Plant	8	0	8	0	0	0	0	0	0	0	0	0	0	0	6	0	14
Total	--	--	31,043	--	--	--	--	31,832	--	--	--	--	--	25,564	2,303	12,191	102,933
Finished Aviation Gasoline																	
Refinery	35	0	35	0	176	0	60	236	21	310	152	0	0	483	48	202	1,004
Bulk Terminal	--	--	461	--	--	--	--	414	--	--	--	--	--	113	18	392	1,398
Pipeline	--	--	0	--	--	--	--	25	--	--	--	--	--	8	0	0	33
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	82	0	0	0	0	82	0	0	82
Total	--	--	496	--	--	--	--	675	--	--	--	--	--	686	66	594	2,517
Naphtha-Type Jet Fuel																	
Refinery	194	28	222	0	509	39	288	836	254	778	362	165	138	1,697	221	890	3,866
Bulk Terminal	--	--	12	--	--	--	--	701	--	--	--	--	--	213	5	611	1,542
Pipeline	--	--	613	--	--	--	--	141	--	--	--	--	--	564	106	354	1,778
Total	--	--	847	--	--	--	--	1,678	--	--	--	--	--	2,474	332	1,855	7,186
Kerosene-Type Jet Fuel																	
Refinery	930	0	930	35	1,207	89	153	1,484	290	2,172	2,260	12	17	4,751	336	3,612	11,113
Bulk Terminal	--	--	4,565	--	--	--	--	3,613	--	--	--	--	--	1,434	233	2,257	12,102
Pipeline	--	--	3,403	--	--	--	--	2,035	--	--	--	--	--	3,957	140	546	10,081
Total	--	--	8,898	--	--	--	--	7,132	--	--	--	--	--	10,142	709	6,415	33,296
Kerosene																	
Refinery	304	62	366	0	776	43	238	1,057	60	726	433	6	74	1,299	12	325	3,059
Bulk Terminal	--	--	3,217	--	--	--	--	1,318	--	--	--	--	--	279	35	51	4,900
Pipeline	--	--	392	--	--	--	--	134	--	--	--	--	--	353	0	0	879
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	3
Total	--	--	3,975	--	--	--	--	2,509	--	--	--	--	--	1,934	47	376	8,841
Distillate Fuel Oils																	
Refinery	5,507	427	5,934	44	7,855	1,801	4,329	14,029	1,387	7,399	3,984	1,154	406	14,330	2,384	5,952	42,629
Bulk Terminal	--	--	42,506	--	--	--	--	23,922	--	--	--	--	--	6,736	908	6,116	80,188
Pipeline	--	--	6,829	--	--	--	--	8,420	--	--	--	--	--	7,867	699	776	24,591
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	2
Total	--	--	55,269	--	--	--	--	46,371	--	--	--	--	--	28,935	3,991	12,844	147,410
Residual Fuel Oils																	
Refinery	3,470	132	3,602	39	2,169	289	163	2,660	328	4,793	3,557	229	37	8,944	445	7,071	22,722
Bulk Terminal	--	--	21,472	--	--	--	--	1,843	--	--	--	--	--	5,036	0	2,038	30,389
Pipeline	--	--	0	--	--	--	--	0	--	--	--	--	--	1	0	10	11
Total	--	--	25,074	--	--	--	--	4,503	--	--	--	--	--	13,981	445	9,119	53,122

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, February 1983
(Thousands of Barrels) (continued)

Commodity	PAD District I		Total	PAD District II				Total	PAD District III					Total	PAD District IV		United States	
	East Coast	Appalachian #1		Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.		Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico		Rocky Ml.	Dist. V West Coast		
Naphtha < 400 Deg. Petro. Feedstock																		
Refinery	44	0	44	0	174	0	102	276	135	935	477	52	0	1,599	0	204	2,123	
Total	44	0	44	0	174	0	102	276	135	935	477	52	0	1,599	0	204	2,123	
Other Oils > 400 Deg. Petro. Feedstock																		
Refinery	5	0	5	0	22	0	1	23	294	847	248	1	0	1,390	0	296	1,714	
Total	5	0	5	0	22	0	1	23	294	847	248	1	0	1,390	0	296	1,714	
Special Naphthas																		
Refinery	26	47	73	0	202	0	166	368	56	1,035	29	163	0	1,283	7	205	1,936	
Bulk Terminal	--	--	790	--	--	--	--	230	--	--	--	--	--	21	0	27	1,068	
Natural Gas Processing Plant	0	0	0	0	0	0	0	105	0	0	0	0	0	105	0	0	1,714	
Total	--	--	863	--	--	--	--	598	--	--	--	--	--	1,409	7	232	3,109	
Lubricants																		
Refinery	1,057	1,058	2,115	0	858	0	679	1,537	36	3,961	1,629	603	0	6,229	76	674	10,631	
Bulk Terminal	--	--	1,445	--	--	--	--	901	--	--	--	--	--	355	3	749	3,453	
Total	--	--	3,560	--	--	--	--	2,438	--	--	--	--	--	6,584	79	1,423	14,084	
Wax																		
Refinery	27	155	182	0	26	0	48	74	27	237	153	68	0	485	8	57	806	
Bulk Terminal	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	0	0	
Pipeline	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	0	0	
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	--	--	182	--	--	--	--	74	--	--	--	--	--	485	8	57	806	
Petroleum Coke																		
Refinery	869	0	869	0	943	215	812	1,970	1	143	294	284	0	722	817	2,517	6,895	
Total	869	0	869	0	943	215	812	1,970	1	143	294	284	0	722	817	2,517	6,895	
Asphalt and Road Oil																		
Refinery	1,545	81	1,626	314	3,071	1,755	1,122	6,262	644	522	937	945	255	3,303	2,105	1,641	14,937	
Bulk Terminal	--	--	3,122	--	--	--	--	3,447	--	--	--	--	--	394	57	177	7,197	
Total	--	--	4,748	--	--	--	--	9,709	--	--	--	--	--	3,697	2,162	1,818	22,134	
Miscellaneous Products																		
Refinery	283	49	332	1	72	9	15	97	29	291	367	49	0	736	1	192	1,358	
Bulk Terminal	--	--	44	--	--	--	--	79	--	--	--	--	--	41	0	94	258	
Pipeline	--	--	0	--	--	--	--	41	--	--	--	--	--	232	0	0	273	
Natural Gas Processing Plant	0	0	0	0	1	0	0	1	73	3	0	1	0	77	0	0	78	
Total	--	--	376	--	--	--	--	218	--	--	--	--	--	1,086	1	286	1,967	
Total Stocks, All Oils																		
	--	--	206,779	--	--	--	--	287,057	--	--	--	--	--	714,617	38,989	184,439	1,431,881	

¹ Includes 33,879 thousands of barrels of domestic crude oil.

Sources: See Explanatory Notes on Data Collection and Estimation.

-- Not Applicable.

Table 21. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, February 1983
(Thousands of Barrels)

Commodity	From I to			From II to					From III to					From IV to					From V to			
	II	III	V	I	III	IV	V	I	II	IV	V	II	III	V	I	II	III	IV				
Crude Oil (Tanker and Barge only)	0	0	0	0	973	454	0	0	215	1,185	0	0	0	0	2,381	0	17,204	0				
Petroleum Products	6,196	161	0	0	2,637	5,891	2,170	0	73,129	16,896	0	2,698	0	0	0	994	374	1,193	45	0	227	0
Natural Gasoline and Isopentane	0	0	0	0	0	499	0	0	0	292	0	0	0	0	0	326	0	0	0	0	0	0
Unfractionated Stream	0	0	0	0	0	50	0	0	0	547	0	0	0	0	0	97	374	0	0	0	0	0
Plant Condensate	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
Liquefied Petroleum Gases	0	24	0	0	610	1,956	149	0	2,135	4,559	0	0	0	0	0	0	0	0	0	0	0	0
Unfinished Oils	7	0	0	0	0	0	0	0	1,438	107	0	0	0	0	0	0	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0	0	50	958	0	0	0	0	0	0	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	4,291	0	0	0	1,316	1,925	1,159	0	37,994	7,204	0	944	0	0	0	386	0	786	0	0	0	0
Finished Leaded Motor Gasoline	2,384	0	0	0	433	1,061	670	0	16,032	3,225	0	561	0	0	0	271	0	536	0	0	0	0
Finished Unleaded Motor Gasoline	1,907	0	0	0	883	864	489	0	21,962	3,979	0	383	0	0	0	115	0	250	0	0	0	0
Finished Aviation Gasoline	0	0	0	0	0	23	18	0	140	77	0	0	0	0	0	0	0	0	0	0	0	0
Naphtha-Type Jet Fuel	125	0	0	0	33	100	0	0	521	51	0	215	0	0	0	74	0	53	0	0	0	0
Kerosene-Type Jet Fuel	238	0	0	0	165	24	708	0	8,174	1,176	0	151	0	0	0	5	0	59	0	0	0	0
Kerosene	93	0	0	0	2	0	0	0	1,142	51	0	0	0	0	0	0	0	0	0	0	0	0
Distillate Fuel Oil	1,423	0	0	0	255	749	136	0	16,661	1,454	0	314	0	0	0	106	0	295	0	0	0	0
Residual Fuel Oil	0	68	0	0	79	476	0	0	3,410	0	0	971	0	0	0	0	0	0	0	117	0	0
Naphtha and Other Oils for Petro.																						
Feedstock	0	0	0	0	8	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0
Special Naphthas	0	0	0	0	18	0	0	0	309	82	0	0	0	0	0	0	0	0	0	0	0	0
Lubricants	0	0	0	0	18	54	0	0	404	181	0	74	0	0	0	0	0	0	45	0	86	0
Wax	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	0	0	0	0	0	0	0	0	116	115	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Products	19	69	0	0	133	35	0	0	610	36	0	29	0	0	0	0	0	0	0	0	24	0
Total All Products	6,196	161	0	0	3,610	6,345	2,170	0	73,344	18,081	0	2,698	0	0	0	994	374	1,193	2,426	0	17,431	0

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 22. Movements of Petroleum Products by Pipeline between PAD Districts, February 1983
(Thousands of Barrels)

Commodity	From I to			From II to			From III to			From IV to			From V to		
	II	III	I	I	III	IV	I	II	IV	V	II	III	V	III	IV
Natural Gasoline and Isopentane	0	0	0	0	499	0	0	0	292	0	0	326	0	0	0
Unfractionated Stream	0	0	0	0	50	0	0	0	547	0	0	97	0	0	0
Plant Condensate	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0
Liquefied Petroleum Gases	0	0	610	1,956	149	0	1,869	4,559	0	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0	958	0	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	3,172	0	1,139	1,925	1,159	1,159	29,035	6,308	0	944	386	0	0	786	0
Finished Leaded Motor Gasoline	1,796	0	366	1,061	670	670	12,249	2,870	0	561	271	0	0	536	0
Finished Unleaded Motor Gasoline	1,376	0	773	864	489	489	16,786	3,438	0	383	115	0	0	250	0
Finished Aviation Gasoline	0	0	0	0	0	18	10	53	0	0	0	0	0	0	0
Naphtha-Type Jet Fuel	34	0	33	100	0	244	51	74	0	215	74	0	0	53	0
Kerosene-Type Jet Fuel	165	0	110	24	708	5,212	925	51	0	151	5	0	0	59	0
Kerosene	50	0	0	0	0	759	51	0	0	0	0	0	0	0	0
Distillate Fuel Oil	1,052	0	227	612	136	13,769	1,203	0	314	106	0	0	0	295	0
Residual Fuel Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Products	0	0	125	0	0	0	0	0	0	0	0	0	0	0	0
Total	4,473	0	2,244	5,166	2,170	50,898	14,953	0	1,624	994	374	1,193	0	0	0

Source: See Explanatory Notes on Data Collection and Estimation.

Table 23. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, February 1983
(Thousands of Barrels)

Commodity	From I to			From II to			From III to				From V to				
	II	III	V	I	III	V	I	New Eng	Cent Atl	Low Atl	II	V	I	II	III
Crude Oil	0	0	0	973	454	0	215	0	215	0	1,185	0	2,381	0	17,204
Petroleum Products	1,723	161	0	393	725	0	22,231	2,387	4,628	15,216	1,943	1,074	45	0	227
Liquefied Petroleum Gases	0	24	0	0	0	0	266	0	0	266	0	0	0	0	0
Unfinished Oils	7	0	0	0	0	0	1,438	0	1,438	0	107	0	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	50	0	0	50	0	0	0	0	0
Finished Motor Gasoline	1,119	0	0	177	0	0	8,959	662	286	8,011	896	0	0	0	0
Finished Aviation Gasoline	0	0	0	0	23	0	130	46	10	74	24	0	0	0	0
Naphtha-Type Jet Fuel	91	0	0	0	0	0	277	0	0	277	0	0	0	0	0
Kerosene-Type Jet Fuel	73	0	0	55	0	0	2,962	157	498	2,307	251	0	0	0	0
Kerosene	43	0	0	2	0	0	383	82	204	97	0	0	0	0	0
Distillate Fuel Oil	371	0	0	28	137	0	2,892	344	499	2,049	251	0	0	0	0
Residual Fuel Oil	0	68	0	79	476	0	3,410	1,063	643	1,704	0	971	0	0	117
Naphtha and Other Oils for Petro. Feed. Use	0	0	0	0	0	0	19	0	10	9	0	0	0	0	0
Special Naphthas	0	0	0	18	0	0	309	24	155	130	82	0	0	0	0
Lubricants	0	0	0	18	54	0	404	0	322	82	181	74	45	0	86
Wax	0	0	0	0	0	0	6	0	6	0	0	0	0	0	0
Asphalt and Road Oil	0	0	0	0	0	0	116	0	0	116	115	0	0	0	0
Miscellaneous Products	19	69	0	8	35	0	610	9	557	44	36	29	0	0	24
Total	1,723	161	0	1,366	1,179	0	22,446	2,387	4,843	15,216	3,128	1,074	2,426	0	17,431

Source: See Explanatory Notes on Data Collection and Estimation.

Table 24. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker and Barge Between PAD Districts, February 1983
(Thousands of Barrels)

Commodity	P.A.D. District I			P.A.D. District II			P.A.D. District III			P.A.D. District IV			P.A.D. District V		
	Receipts into PADD I	Shipments from PADD I	Net Receipts PADD I	Receipts into PADD II	Shipments from PADD II	Net Receipts PADD II	Receipts into PADD III	Shipments from PADD III	Net Receipts PADD III	Receipts into PADD IV	Shipments from PADD IV	Net Receipts PADD IV	Receipts into PADD V	Shipments from PADD V	Net Receipts PADD V
Crude Oil (Tanker and Barge only)	3,569	0	3,569	1,185	1,427	-242	17,658	1,400	16,258	0	0	0	0	19,585	-19,585
Petroleum Products	75,811	6,357	69,454	24,086	10,698	13,388	6,653	92,723	-86,070	2,170	2,561	-391	3,891	272	3,619
Natural Gasoline	0	0	0	618	499	119	499	292	207	0	326	-326	0	0	0
Unfractionated Stream	0	0	0	644	50	594	424	547	-123	0	471	-471	0	0	0
Plant Condensate	0	0	0	6	0	6	0	6	-6	0	0	0	0	0	0
Liquefied Petroleum Gases	2,745	24	2,721	4,559	2,715	1,844	1,980	6,694	-4,714	149	0	149	0	0	0
Unfinished Oils	1,438	7	1,431	114	0	114	0	1,545	-1,545	0	0	0	0	0	0
Motor Gasoline Blending Components	50	0	50	958	0	958	0	1,008	-1,008	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	39,310	4,291	35,019	11,881	4,400	7,481	1,925	46,142	-44,217	1,159	1,172	-13	1,730	0	1,730
Finished Leaded Motor Gasoline	16,465	2,384	14,081	5,880	2,164	3,716	1,061	19,818	-18,757	670	807	-137	1,097	0	1,097
Finished Unleaded Motor Gasoline	22,845	1,907	20,938	6,001	2,236	3,765	864	26,324	-25,460	489	365	124	633	0	633
Finished Aviation Gasoline	140	0	140	77	41	36	23	217	-194	18	0	18	0	0	0
Naphtha-Type Jet Fuel	554	125	429	250	133	117	100	787	-687	0	127	-127	268	0	268
Kerosene-Type Jet Fuel	8,339	238	8,101	1,419	897	522	24	9,501	-9,477	708	64	644	210	0	210
Kerosene	1,144	93	1,051	144	2	142	0	1,193	-1,193	0	0	0	0	0	0
Distillate Fuel Oil	16,916	1,423	15,493	2,983	1,140	1,843	749	18,429	-17,680	136	401	-265	609	0	609
Residual Fuel Oil	3,489	68	3,421	0	555	-555	661	4,381	-3,720	0	0	0	971	117	854
Naphtha and Other Oils for Petro.															
Feedstock Use	27	0	27	0	8	-8	0	19	-19	0	0	0	0	0	0
Special Naphthas	327	0	327	82	18	64	0	391	-391	0	0	0	0	0	0
Lubricants	467	0	467	181	72	109	140	659	-519	0	0	0	74	131	-57
Wax	6	0	6	0	0	0	0	6	-6	0	0	0	0	0	0
Asphalt and Road Oil	116	0	116	115	0	115	0	231	-231	0	0	0	0	0	0
Miscellaneous Products	743	88	655	55	168	-113	128	675	-547	0	0	0	29	24	5
Total All Products	79,380	6,357	73,023	25,271	12,125	13,146	24,311	94,123	-69,812	2,170	2,561	-391	3,891	19,857	-15,966

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 25. Production of Residual Fuel Oil By Sulfur Content, February 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States			
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico		Total	Rocky Mt.	West Coast
Residual Fuel Oil	3,390	146	3,536	36	2,276	171	257	2,740	773	6,204	1,956	380	69	9,382	193	8,134	23,985
0.00 to 0.30% Sulfur	44	38	82	0	72	0	0	72	51	474	289	99	3	916	40	650	1,760
0.31 to 1.00% Sulfur	1,900	2	1,902	36	448	0	178	662	618	773	1,410	206	3	3,010	49	2,338	7,961
Greater Than 1.00% Sulfur	1,446	106	1,552	0	1,756	171	79	2,006	104	4,957	257	75	63	5,456	104	5,146	14,264

Source: See Explanatory Notes on Data Collection and Estimation.

Table 26. Stocks of Residual Fuel Oil By Sulfur Content, February 1983
(Thousands of Barrels)

Commodity	PAD District I		PAD District II				Total	PAD District III				Total	PAD		United States		
	East Coast	Appalachian #1	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.		Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.		New Mexico	Dist. IV Rocky Mt.		Dist. V West Coast	
Residual Fuel Oil -- 0.00 to 0.30% Sulfur																	
Refinery	230	44	274	0	116	0	0	116	71	280	57	21	13	442	95	587	1,514
Bulk Terminal	--	--	4,728	--	--	--	--	53	--	--	--	--	--	211	0	5	4,997
Total	--	--	5,002	--	--	--	--	169	--	--	--	--	--	653	95	592	6,511
Residual Fuel Oil -- 0.31 to 1.00% Sulfur																	
Refinery	2,047	5	2,052	39	611	0	57	707	191	1,336	1,371	116	2	3,016	91	2,133	7,999
Bulk Terminal	--	--	7,500	--	--	--	--	481	--	--	--	--	--	2,263	0	420	10,664
Total	--	--	9,552	--	--	--	--	1,188	--	--	--	--	--	5,279	91	2,553	18,663
Residual Fuel Oil -- Greater than 1.00% Sulfur																	
Refinery	1,193	83	1,276	0	1,442	289	106	1,837	66	3,177	2,129	92	22	5,486	259	4,351	13,209
Bulk Terminal	--	--	9,244	--	--	--	--	1,309	--	--	--	--	--	2,562	0	1,613	14,728
Total	--	--	10,520	--	--	--	--	3,146	--	--	--	--	--	8,048	259	5,964	27,937

Sources: See Explanatory Notes on Data Collection and Estimation.

--- Not Applicable

Table 27. Movements of Residual Fuel Oil by Tanker and Barge Between PAD Districts, By Sulfur Content, February 1983
(Thousands of Barrels)

Commodity	From I to			From II to			From III to				From V to		
	II	III	V	I	III	V	I	New Eng	Cent Atl	Low Atl	II	I	III
Residual Fuel Oil	0	68	0	79	476	0	3,410	1,063	643	1,704	0	971	0
0.00 to 0.30% Sulfur	0	0	0	0	0	0	0	0	0	0	0	0	0
0.31 to 1.00% Sulfur	0	0	0	4	0	0	743	0	173	570	0	0	0
Greater Than 1.00% Sulfur	0	68	0	75	476	0	2,667	1,063	470	1,134	0	971	0

Source: See Explanatory Notes on Data Collection and Estimation.

Table 28. Imports of Residual Fuel Oil by Country of Origin, February 1983
(Thousands of Barrels)

Country	Residual Fuel Oil			Total
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%	
Arab OPEC				
Algeria	699	0	0	699
Iraq	0	0	0	0
Kuwait	0	0	0	0
Qatar	0	0	0	0
Saudi Arabia	0	0	0	0
United Arab Emirates	0	0	0	0
Subtotal Arab OPEC	699	0	0	699
Other OPEC				
Ecuador	0	0	117	117
Gabon	0	0	0	0
Indonesia	0	41	41	82
Iran	0	0	0	0
Nigeria	218	0	0	218
Venezuela	1,364	278	2,396	4,038
Subtotal Other OPEC	1,581	319	2,554	4,455
Other				
Angola	0	305	0	305
Australia	250	0	0	250
Bahamas	735	149	0	884
Bolivia	0	0	0	0
Brazil	311	434	0	745
Brunei	0	0	0	0
Canada	0	0	0	0
Congo	0	475	255	730
Egypt	0	348	0	348
France	0	0	0	0
Ghana	0	0	0	0
Liberia	0	0	0	0
Malaysia	0	0	0	0
Mexico	0	0	825	825
Netherlands	0	0	0	0
Netherlands Antilles	0	213	3,394	3,607
Norway	0	0	0	0
Oman	0	0	0	0
People's Republic of China	0	0	0	0
Peru	201	68	0	269
Puerto Rico	0	0	0	0
Spain	1	0	0	1
Trinidad	0	0	0	0
Tunisia	0	0	0	0
United Kingdom	0	339	0	339
Virgin Islands	702	1,282	1,706	3,691
Yugoslavia	0	0	0	0
Zaire	0	0	0	0
Other Western Hemisphere	0	0	0	0
Other Eastern Hemisphere	1	342	201	544
Subtotal Other	2,200	3,955	6,381	12,537
Other				
Total Imports	4,480	4,274	8,936	17,691

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 29. Imports of Residual Fuel Oil by Sulfur Content by State of Entry, February 1983
(Thousands of Barrels)

State	Residual Fuel Oil				Total
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%		
PAD District I	4,261	3,868	8,085		16,214
Delaware	0	339	80		418
Florida	0	299	883		1,182
Maine	0	213	720		934
Maryland	0	119	82		202
Massachusetts	0	149	1,561		1,710
New Jersey	219	300	644		1,163
New York	3,761	1,645	1,848		7,254
North Carolina	0	0	267		267
Pennsylvania	281	804	548		1,632
Rhode Island	0	0	60		60
South Carolina	0	0	584		584
Vermont	0	0	0		0
Virginia	0	0	809		809
PAD District II	0	194	59		253
Illinois	0	132	0		132
Michigan	0	62	0		62
Minnesota	0	0	15		15
North Dakota	0	0	44		44
Ohio	0	0	0		0
PAD District III	219	0	323		541
Louisiana	1	0	0		1
Texas	218	0	323		540
PAD District IV	0	0	6		6
Montana	0	0	6		6
PAD District V	1	212	463		676
Arizona	0	0	0		0
California	0	0	218		218
Hawaii	1	212	245		458
All PAD Districts	4,480	4,274	8,936		17,691

Note: Total may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.

Glossary





Definitions of Petroleum Products and Other Terms

Alcohol. The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group; $\text{CH}-(\text{CH})_n-\text{OH}$. *Alcohol* includes methanol and ethanol.

Alkylation. A refinery process for chemically combining isoparaffin with olefin hydrocarbons. The product, alkylate, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

API Gravity. An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it may be calculated in terms of the following formula:

$$\text{Deg API} = \frac{141.5}{\text{sp gr } 60\text{F}/60\text{F}} - 131.5$$

Aromatics. Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene.

Asphalt. A dark-brown-to-black cement-like material, containing bitumens as the predominant constituents, obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. The conversion factor for asphalt is 5.5 barrels of 42 U.S. gallons per short ton.

ASTM. The acronym for the American Society for Testing and Materials.

Aviation Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation gasoline.

Aviation Gasoline, Finished. All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G-5572. Excludes blending components which will be used in blending or compounding into finished aviation gasoline.

Barrel. A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt and wax to barrels are given in the definitions for these products.

Barrels per Calendar Day. The maximum number of barrels of input that can be processed in a twenty-four hour period after making allowances for the following limitations: downstream limitations, environmental constraints, types and grades of inputs, planned and unplanned downtime, and types and grades of products.

Barrels Per Stream Day. The amount a unit can process running at full capacity under optimal crude and product slate conditions.

Bi-metallic. A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of two metals (e.g., platinum, rhenium).

Butane. A normally gaseous paraffinic hydrocarbon, C_4H_{10} . It is extracted from natural gas or refinery gas streams. Butane is covered by ASTM Specification D1835 and Gas Processors Association Specification for commercial butane.

Isobutane. A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 10.9 degrees F. This classification includes mixtures of gases that contain 80 percent liquid volume or more isobutane. It is extracted from natural gas and refinery gas streams.

Normal Butane. A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 31.1 degrees F. This classification includes mixtures of gases that contain 80 percent or more normal butane.

Other Butanes. All butanes not included as normal butane or isobutane.

Butane-Propane Mixtures. Mixtures consisting exclusively of butane and propane that conform to ASTM Specification D1835 and Gas Processors Association Specification for commercial butane-propane mixtures. They are extracted from natural gas and refinery gas streams.

Butylene. An olefinic hydrocarbon, C_4H_8 , recovered from refinery processes.

Catalytic Cracking. The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil.

Catalytic Hydrocracking. A refining process for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel and/or high grade fuel oil. Hydrocracking is an efficient, relatively low temperature process using hydrogen and a catalyst.

Catalytic Hydrotreating. A process for treating petroleum fractions (e.g., distillate fuel oil and residual fuel oil) and unfinished oils (e.g., naphthas, reformer feeds and heavy gas oil) in the presence of catalysts and substantial quantities of hydrogen to upgrade their quality.

Catalytic Reforming. The use of controlled heat and pressure with catalysts to effect the rearrangement of certain hydrocarbon molecules without altering their composition appreciably; the conversion of low-octane

gasoline fractions into higher octane stocks suitable for blending into finished gasoline; also the conversion of naphthas to obtain a more volatile product of higher octane number.

Conventional. A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of a metal and a non-metal (e.g., platinum, alumina).

Coal. A generic term applied to carbonaceous rocks that were formed by the partial or complete decomposition of vegetation. These stratified carbonaceous rocks are either solid or brittle and are highly combustible. Includes lignite, bituminous coal, and anthracite coal which conform to ASTM Specification D388.

Crude Distillation. The refining process of separating crude oil components by heating and subsequent condensing of the fractions by cooling.

Crude Oil (including Lease Condensate). A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite and oil shale. Drip gas is also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign according to the following:

Domestic. Crude oil produced in the United States or from its outer continental shelf as defined in 43 U.S.C. 1331.

Foreign. Crude oil produced outside the United States.

Delayed Cooking. A process to produce low Conradson carbon gas for catalytic cracking feedstock and for gasoline.

Distillate Fuel Oil. A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1, No. 2, and No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuel.

No. 1 Fuel Oil. A light distillate fuel oil intended for use in vaporizing pot-type burners. ASTM Specification D396 specifies for this grade maximum distillation temperatures of 420 degrees F. at the 10-percent point and 550 degrees F. at the 90-percent point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100 degrees F.

No. 2 Fuel Oil. A distillate fuel oil for use in atomizing-type burners for domestic heating or for moderate capacity commercial-industrial burner units. ASTM

Specification D396 specifies for this grade distillation temperatures at the 90-percent point between 540 degrees and 640 degrees F., and kinematic viscosities between 2.0 and 3.6 centistokes at 100 degrees F.

No. 1 and No. 2 Diesel Fuel Oils. Distillate fuel oils used in compression-ignition engines, as given by ASTM Specification D975:

No. 1-D. A volatile distillate fuel oil with a boiling range between 300-575 degrees F. and used in high-speed diesel engines generally operated under wide variations in speed and load. Includes type C-B diesel fuel used for city buses and similar operations. Properties are defined in ASTM Specifications D975.

No. 2-D. A gas oil type distillate of lower volatility with distillation temperatures at the 90-percent point between 540-640 degrees F. for use in high-speed diesel engines generally operated under uniform speed and load conditions. Includes Type R-R diesel fuel used for railroad locomotive engines, and Type T-T for diesel-engine trucks. Properties are defined in ASTM Specification D975.

No. 4 Fuel Oil. A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D396 or Federal Specification VV-F-815C; its kinematic viscosity is between 5.8 and 26.4 centistokes at 100 degrees F. Also included is No. 4-D, a fuel oil for low- and medium-speed diesel engines that conforms to ASTM Specification D975.

Eastern Hemisphere. That half of the earth east of the Atlantic Ocean which includes Europe, Asia, Africa, and Australia. The Hawaiian Foreign Trade Zone is in this hemisphere.

Electric Energy (Purchased). Electricity purchased for refinery operations that is not produced within the refinery complex.

Ethane. A normally gaseous paraffinic compound (C₂H₆) extracted from natural gas and refinery gas streams. "Ethane" includes any products containing 90 percent liquid volume or more ethane.

Ethane-Propane Mixtures. Mixtures of ethane and propane in which neither component is 90 percent or more of the liquid volume. It is extracted from natural gas and refinery gas streams.

Ethylene. An olefinic hydrocarbon, (C₂H₄) recovered from refinery or petrochemical processes.

Field Production. Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, and new supply of other hydrocarbons and alcohol.

Fluid Coking. A thermal process utilizing the fluidized-solids technique for continuous conversion of heavy, low-grade oils into lighter products.

Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation or motor gasoline.

Gas Oil. A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. Derives its name from having originally been used in the manufacture of illuminating gas. Now supplies distillate-type fuel oils and diesel fuel, also cracked to produce gasoline.

Imported Crude Oil Burned as Fuel. The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. *Imported crude oil burned as fuel* includes lease condensate and liquid hydrocarbons produced from tar sand oil, gilsonite, and oil shale.

Isomerization. A refining process which alters the fundamental arrangement of atoms in the molecule. Used to convert normal butane into isobutane, an alkylation process feedstock, and normal pentane and hexane into isopentane and isohexane, high-octane gasoline components.

Kerosene. A petroleum distillate that boils at a temperature between 300-550 degrees F., that has a flash point higher than 100 degrees F. by ASTM Method D56, that has a gravity range from 40-46 degrees API, and that has a burning point in the range of 150-175 degrees F. Included are the two classifications recognized by ASTM D-3699: No. 1-K and No. 2-K, and all grades of kerosene called range or stove oil which have properties similar to No. 1 fuel oil, but with a gravity of about 43 degrees API and a maximum end-point of 625 degrees F. Kerosene is used in space heaters, cook stoves, and water heaters and is suitable for use as an illuminant when burned in wick lamps.

Kerosene-Type Jet Fuel. A quality kerosene product with an average gravity of 40.7 degrees API, a 10 percent distillation temperature of 400 degrees F. It is covered by ASTM Specification D1655 and Military Specifications MIL-T-5624L (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type; it is used primarily for commercial turbojet and turbo-prop aircraft engines.

Lease Condensate. A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

Liquefied Petroleum Gases (LPG). Propane, propylene, butanes, butylene, butane-propane mixtures, ethane-propane mixtures, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

Liquefied Refinery Gases (LRG). Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration they are retained in the liquid state. The reported categories are ethane and/or ethylene, propane and/or propylene, butane and/or butylene, butane-propane mixtures, and isobutane. Excludes still gases used for chemical or rubber manufacture which are reported as a petrochemical feedstock and also excludes liquefied gases ready for blending into gasoline which are reported as gasoline blending components. Liquefied refinery gases are reported for use as petrochemical feedstocks or other uses.

Lubricating Oils. A substance used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. *Lubricants* includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. The three categories include Bright Stock, Neutral, and Other.

Bright Stock. A refined, high viscosity lubricating oil base stock that is usually made from residuum by a treatment such as deasphalting, acid treatment, or solvent extraction.

Neutral. A distillate lubricating oil base stock with a viscosity that is usually not above 550 Saybolt Universal Seconds (SUS) at 100 degrees F. It is prepared by a treatment such as hydrofining, acid treatment, or solvent extraction.

Other. A lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils.

Middle Distillates. A general classification that includes distillate fuel oil and kerosene.

Miscellaneous Products. Includes all finished products not classified elsewhere, e.g., petrolatum, absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, speciality oils and medicinal oils.

Motor Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished motor gasoline. Pool gasoline is included in this category.

Motor Gasoline, Finished. A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition engines. Specifications for motor gasoline, as given in ASTM Specification D439 or Federal Specification VV-G-1690B, include a boiling range of 122 degrees to 158 degrees F. at the 10-percent point to 365 degrees to 374 degrees F. at the 90-percent point and a Reid vapor pressure range from 9 to 15 psi. *Motor gasoline* includes finished leaded gasoline, finished unleaded gasoline, and gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Finished Leaded Gasoline. Contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon. The actual lead content of any given gallon, however, may vary as a function of the size of the producer and company according to specific Environmental Protection Agency waiver provisions. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Finished Unleaded Gasoline. Contains not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes unleaded gasohol. Blend stock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Gasohol. A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol) in which 10 percent or more of the product is alcohol.

Motor Gasoline, Total. Includes finished leaded motor gasoline, finished unleaded motor gasoline, motor gasoline blending components, and gasohol.

Naphtha-Type Jet Fuel. A fuel in the heavy naphtha boiling range with an average gravity of 52.8 degrees API and 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees F., meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

Natural Gas. A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

Natural Gas Field Facility. A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, butane, natural gasoline, etc., and to control the quality of natural gas to be marketed.

Natural Gas Plant Liquids. Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials, and are classified as follows: Ethane, propane, ethane-propane mix, isobutane, butane, butane-propane mix, isopentane, natural gasoline, plant condensate, unfractionated stream, and other products from natural gas processing plants (i.e., products meeting the standards of finished petroleum products produced at natural gas processing plants, such as finished

motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

Natural Gasoline and Isopentane. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, C₅H₁₂, obtained by fractionation of natural gasoline or isomerization of normal pentane.

OPEC. The acronym for the Organization of Petroleum Exporting Countries, oil-producing and exporting countries that have organized for the purpose of negotiating with oil companies on matters of oil production, prices, and future concession rights. Current members are Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

Operable Distillation Capacity. The maximum amount of input that can be processed by a crude oil distillation unit in a 24-hour period, making allowances for processing limitations due to types and grades of inputs, limitations of downstream facilities, scheduled and unscheduled downtimes, and environmental constraints. Includes any shutdown capacity that could be placed in operation within days.

Other Hydrocarbons. Materials received by a refinery and consumed as raw materials. Includes hydrogen, coal tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

Petrochemical Feedstock Use. Chemical feedstocks derived from petroleum, principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are *Naphtha-less than 400 degrees F. end-point* and *Other oils-over 400 degrees F. end-point*.

Naphtha-Less Than 400 Degrees F. End-Point. A naphtha with an end point of less than 400 degrees F. that is reported as used as a petrochemical feedstock.

Other Oils-Over 400 Degrees F. End-Point. Oils with an end point over 400 degrees F. that is reported as used as a petrochemical feedstock.

Petroleum Coke. A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is five barrels of 42 U.S. gallons per short ton.

Marketable Coke. Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This *green* coke may be sold or further purified by calcining.

Catalyst Coke. In many catalytic operations (i.e., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refinery process. This carbon or coke is not recoverable in a concentrated form.

Petroleum Products. Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, natural gasoline and isopentane, plant condensate, unfractionated stream, liquefied petroleum gases, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, naphtha less than 400° F. end-point, other oils-over 400° F. end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Petroleum Refinery. An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

Plant Condensate. One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

Petroleum Refinery. An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas plant liquids, other hydrocarbons, and alcohol.

Plant Condensate. One of the natural gas plant liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

Primary Stocks. Stocks of crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tankfarms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in transit from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. *Primary Stocks* excludes stocks of foreign origin that are held in bonded warehouse storage.

Propane. A normally gaseous paraffinic compound, C₃H₈, which includes all products covered by NGPA Specification for commercial and HD-5 propane and ASTM Specification D1835. It is used primarily as a fuel and as a petrochemical feedstock.

Propylene. An olefinic hydrocarbon, C₃H₆, recovered from refinery or petrochemical processes.

Residual Fuel Oil. The topped crude of refinery operation which includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D396 and Federal Specification VV-F-815C, Navy Special fuel oil as defined in Military

Specification MIL-F-859E including Amendment 2 (NATO Symbol F-77), and Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Includes imported crude oil to be burned as a fuel.

Road Oil. Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades from 0, the most liquid, to 5, the most viscous.

Special Naphthas. All finished products within the gasoline range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point and have a boiling range of 90 degrees to 220 degrees F. *Special naphthas* includes all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

Steam (Purchased). Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

Still Gas (Refinery Gas). Any form or mixture of gas produced in refineries by distillation cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, butane, butylene, propane, propylene, etc. Still gas is reported for petrochemical feedstock use and/or refinery fuel use.

Petrochemical Feedstock Use. Includes all refinery streams which are used by chemical or rubber manufacturing operations for further processing, less the amount of such streams returned to the source refinery. Finished petrochemical products are not included. For example, polyethylene, butadiene, etc., are considered petrochemical products; therefore, only their feed-stock equivalents are included.

Fuel Use. All other still gas.

Strategic Petroleum Reserve (SPR). Stocks (currently, only crude oil) maintained by the Federal Government for use during periods of major supply interruption.

Thermal Cracking. A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking is used to increase the yield of gasoline obtainable from crude oil.

Unfinished Oils. Includes all oils requiring further processing, except those requiring only mechanical blending.

Unfractionated Streams. Mixtures of unsegregated natural gas liquid components excluding those included in plant condensate. This product is extracted from natural gas.

Vacuum Distillation. Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique, with its relatively low temperatures, prevents cracking or decomposition of the charge stock.

Visbreaking. A thermal cracking process in which heavy vacuum-still bottoms produced on the primary distillation unit are cracked to increase production of distillate products.

Wax. A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42-gallon barrel.

Microcrystalline Wax. Wax extracted from certain petroleum residues having a finer and less apparent

crystalline structure than paraffin wax and having the following physical characteristics:

Penetration at 77 degrees F. (D-1321)-60 maximum. Viscosity at 210 degrees F. in Saybolt Universal Seconds (SUS) (D-88)-60 SUS (10.22 centistokes) minimum to 150 SUS (31.8 centistokes) maximum. Oil content (D-721)-5 percent minimum.

Crystalline-Fully Refined Wax. A light-colored paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D-88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D-721)-0.5 percent maximum. Other + 20 color, Saybolt minimum.

Crystalline-Other Wax. A paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D-88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D-721)-0.51 percent minimum to 15 percent maximum.

Western Hemisphere. That half of the earth that includes North and South America and the surrounding waters.

Bureau of Mines Petroleum Refining Districts and PAD Districts

The following are the Bureau of Mines petroleum refining districts which make up the PAD districts:

PAD District I

East Coast: District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

Appalachian #1: The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

PAD District II

Appalachian #2: The following counties of the State of Ohio: Erie, Huron, Crawford, Marion, Delaware, Franklin, Pickaway, Ross, Pike, Scioto, and all counties east thereof.

Indiana—Illinois—Kentucky: The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and that part of the State of Ohio not included in the Appalachian District.

Minnesota—Wisconsin—North and South Dakota: The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

Oklahoma—Kansas—Missouri: The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

PAD District III

Texas Inland: The State of Texas except the Texas Gulf Coast District.

Texas Gulf Coast: The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

Louisiana Gulf Coast: The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

North Louisiana—Arkansas: The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

New Mexico: The State of New Mexico.

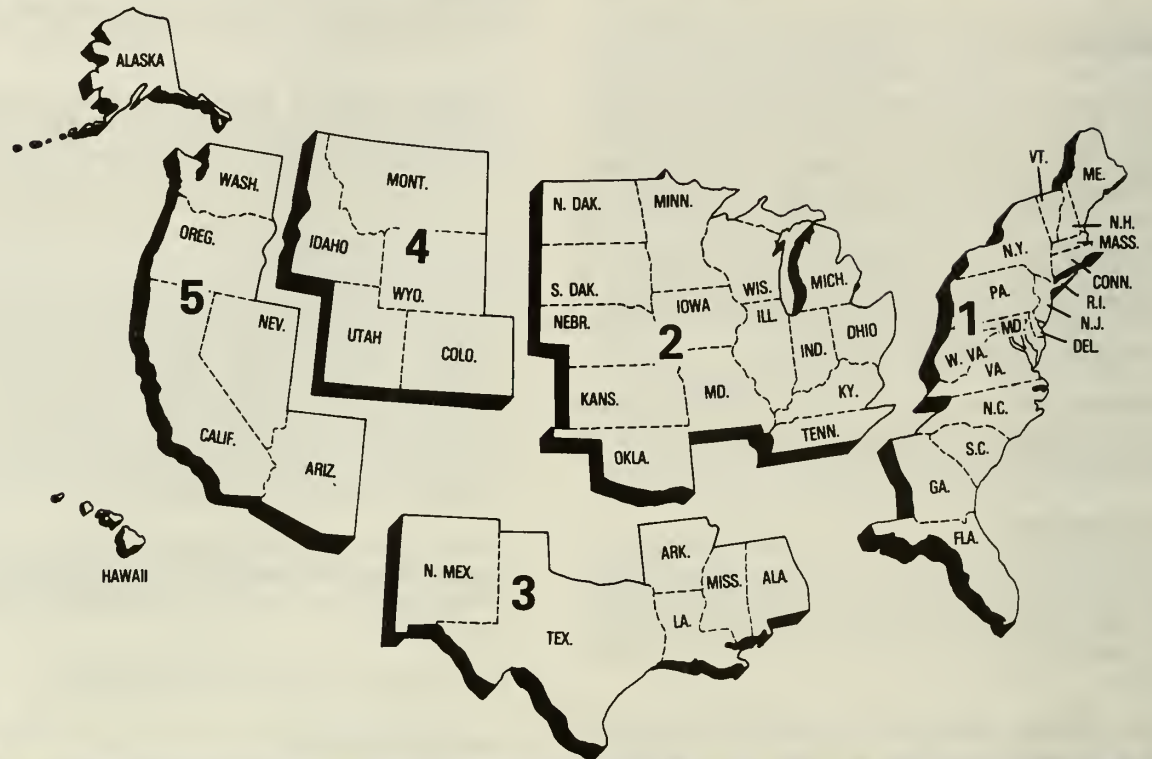
PAD District IV

Rocky Mountain: The States of Montana, Idaho, Wyoming, Utah, and Colorado.

PAD District V

West Coast: The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

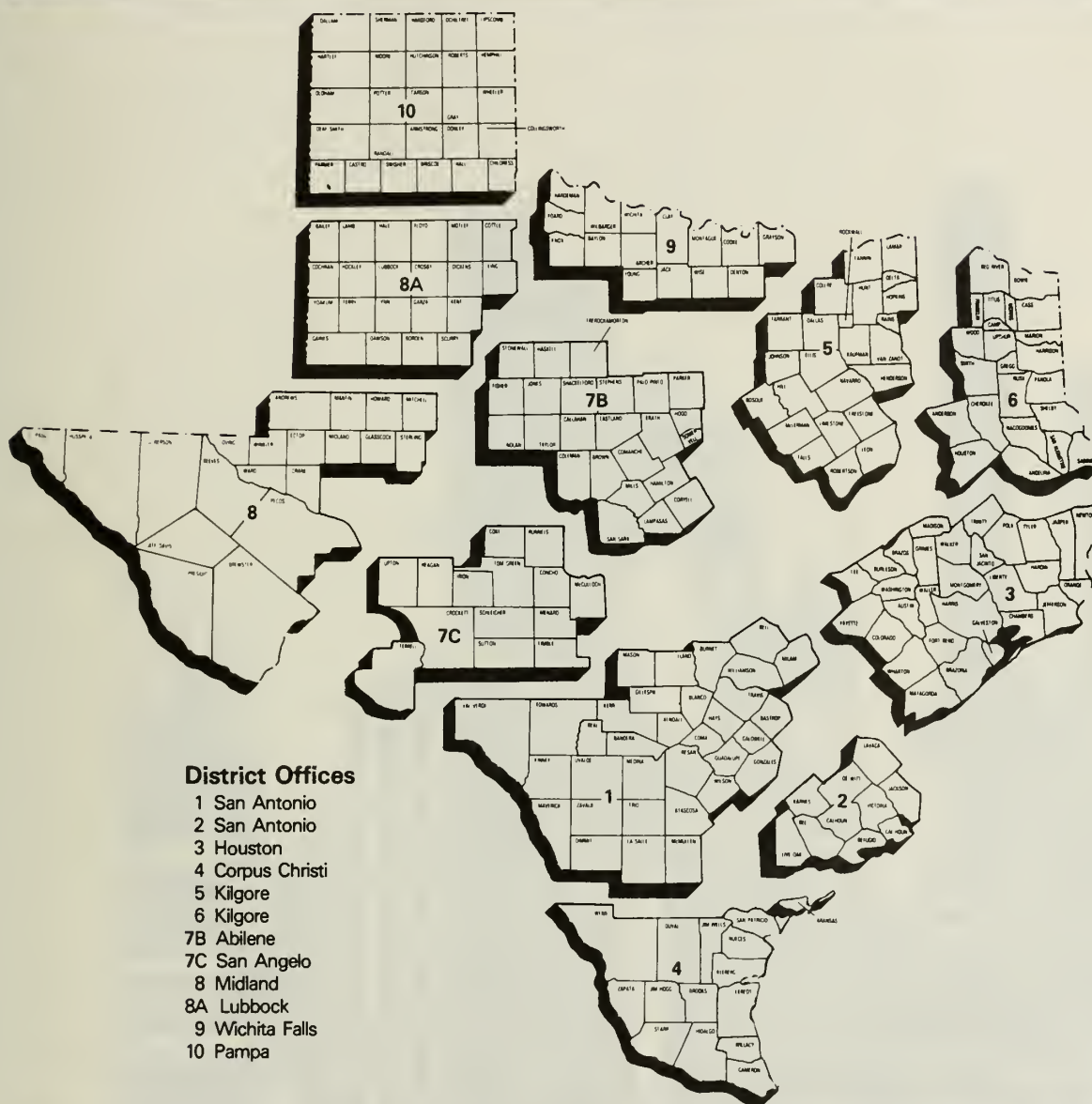
Petroleum Administration for Defense (PAD) Districts

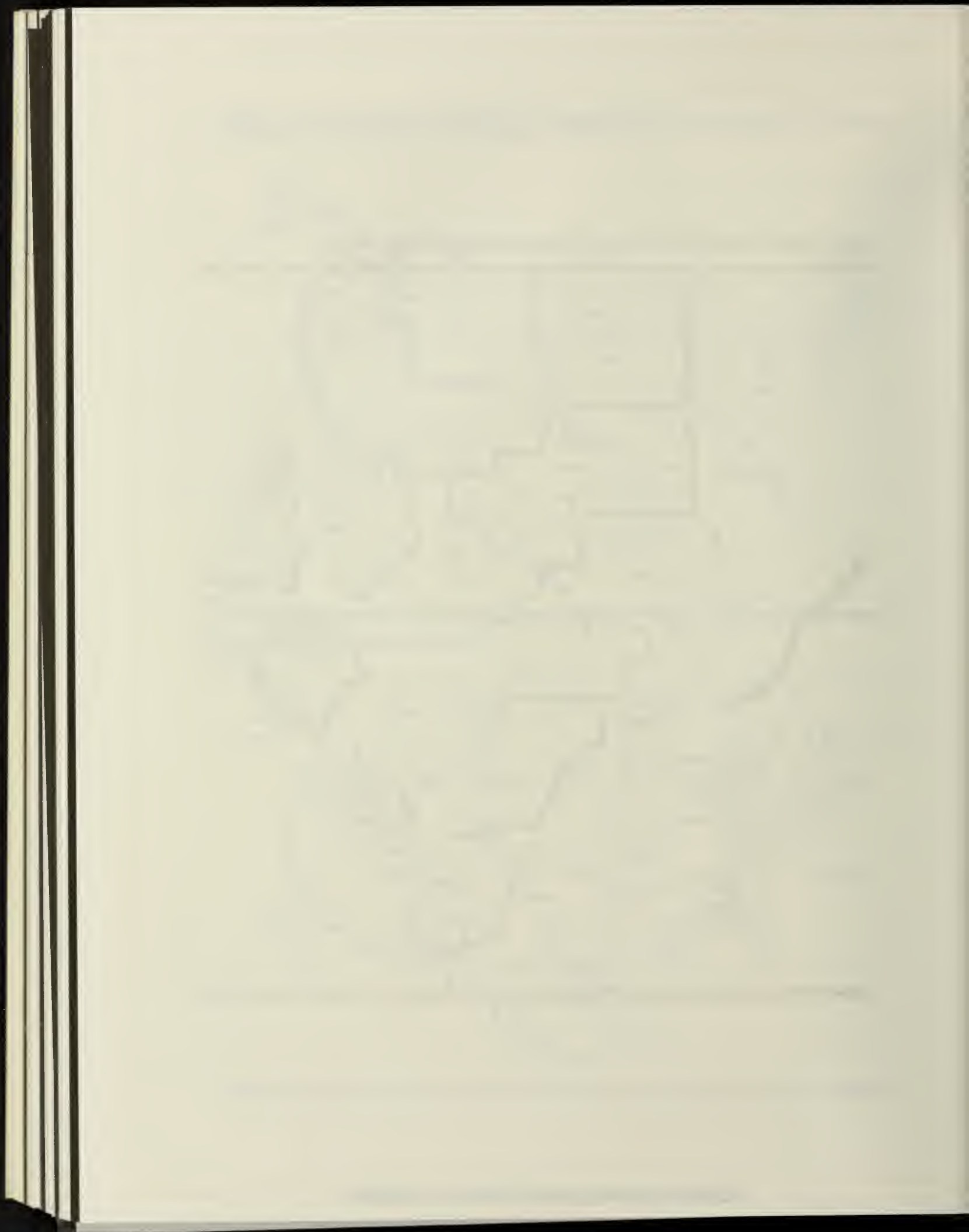


Bureau of Mines Refining Districts

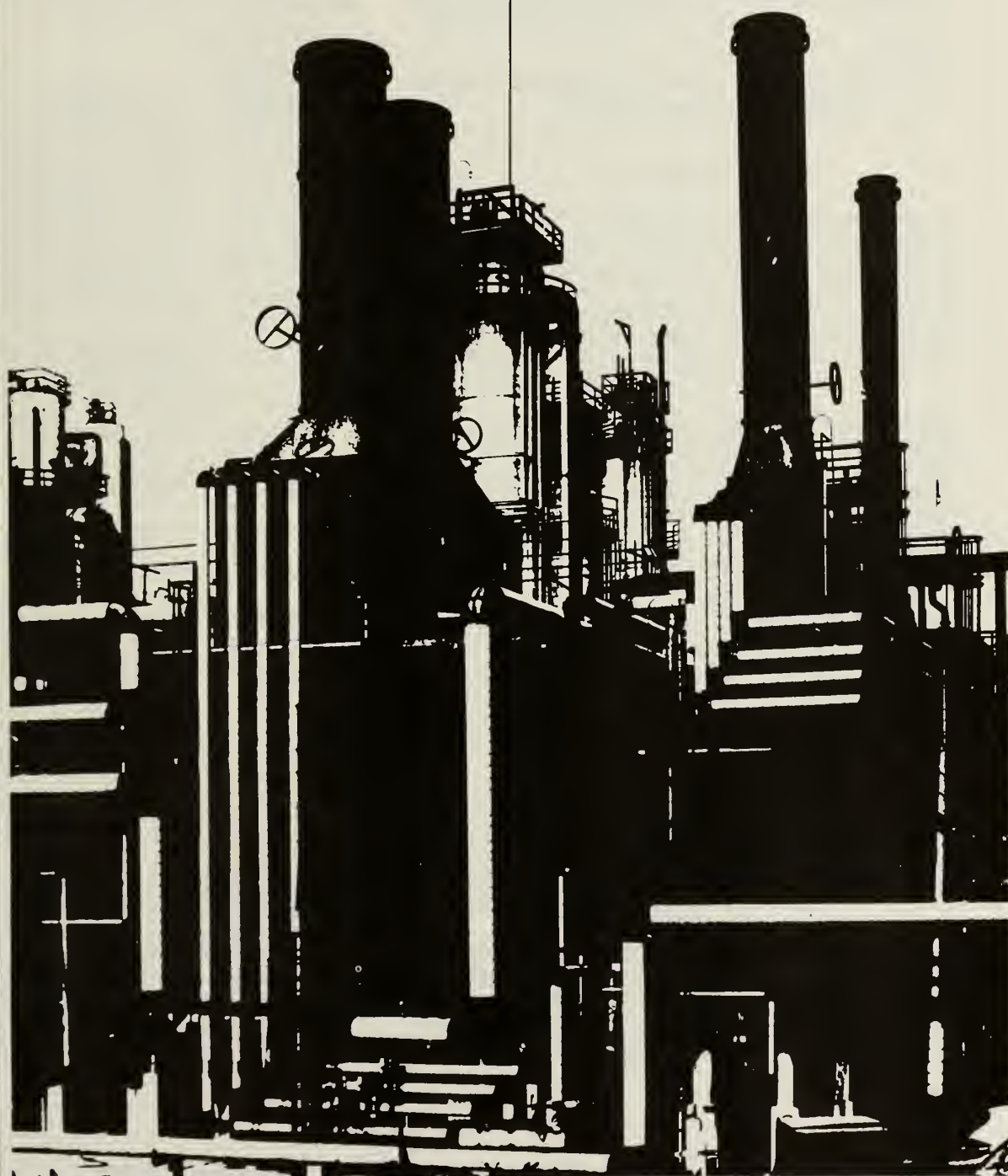


District Map Oil and Gas Division Railroad Commission of Texas





Explanatory Notes





Note 1: Data Collection Methodology

Background

Beginning in January 1983, the Energy Information Administration (EIA) unified its petroleum supply data collection activities into the Petroleum Supply Reporting System (PSRS). The PSRS represents a family of data collection survey forms, data processing systems and publication systems that have been consolidated to achieve comparability and consistency throughout. The primary focus of the consolidation has been to revise the weekly and monthly survey reporting forms to assure consistency in form layout, preparation instructions, and definitions. As a result, a new set of survey forms were implemented in January 1983. The following are the new form numbers and their corresponding predecessor forms:

New Form Number	Name	Old Form Number
EIA-800	Weekly Refinery Report	EIA-161
EIA-801	Weekly Bulk Terminal Report	EIA-162
EIA-802	Weekly Product Pipeline Report	EIA-163
EIA-803	Weekly Crude Oil Stocks Report	EIA-164
EIA-804	Weekly Imports Report	EIA-165
EIA-805	Weekly Shipments from Puerto Rico to the United States Report	—
EIA-810	Monthly Refinery Report	EIA-87
EIA-811	Monthly Bulk Terminal Report	EIA-88
EIA-812	Monthly Product Pipeline Report	EIA-89
EIA-813	Monthly Crude Oil Report	EIA-90
ERA-60	Monthly Imports Report	ERA-60
EIA-815	Monthly Shipments from Puerto Rico to the United States Report	FEA-P133-M-0
EIA-816	Monthly Natural Gas Liquids Report	EIA-64
EIA-817	Monthly Tanker and Barge Movement Report	EIA-170

Forms EIA-800 through 805 comprise the Weekly Petroleum Supply Reporting System (WPSRS). This system is designed to collect basic refinery operations and product stock data for major products on a weekly basis. Data from the WPSRS are published in the *Weekly Petroleum Status Report (WPSR)* and are also used to calculate the preliminary statistics in the "Summary Statistics" section of the *Petroleum Supply Monthly*

(PSM). A description of the WPSRS survey forms follows in Note 1.1.

Forms EIA-810-813, 815-817 and ERA-60 comprise the Monthly Petroleum Supply Reporting System (MPSRS). These surveys collect detailed refinery operations data, refinery, bulk terminal and pipeline stocks data, crude oil and petroleum product imports data and movements of petroleum products and crude oil between PAD Districts data. These surveys are the primary source of data for the "Summary Statistics" and "Detailed Statistics" sections of the PSM. A description of MPSRS survey forms follows in Note 1.2.

Data are also obtained in magnetic tape form from the Bureau of the Census on a monthly basis. These tapes contain aggregated import and export statistics that are used in the preparation of the PSM. A description of the Census data follows in Note 1.3.

Note 1.1: Weekly Petroleum Supply Reporting System (WPSRS)

Background

The EIA first began publishing weekly petroleum supply statistics in April 1979 in response to the Iranian oil crisis. Initially, the published data were taken from the American Petroleum Institute (API) *Weekly Statistical Bulletin*. However, in January 1980 the EIA began to publish weekly statistics from its own surveys, with the exception of imports statistics which the EIA did not begin collecting until June 1980.

The weekly surveys collect data comparable to those collected on a monthly basis. Selected petroleum companies report weekly data to the EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804, the importer of record reports each shipment entering the United States. On Form EIA-805, a company shipping unfinished oils and finished petroleum products into the United States from Puerto Rico reports each shipment. Current weekly data and the most recent monthly data are used to estimate the totals that are published in the *Weekly Petroleum Status Report*.

Sample Frame

The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Sampled companies report data only for facilities in the 50 States and District of Columbia.

The sample for each survey is taken from the following universe:

EIA-800: Based on the EIA-810 universe, which includes all petroleum refineries in the United States and

its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and plants that produce finished motor gasoline through mechanical blending. The selected sample size is 215.

EIA-801: Based on the EIA-811 universe, which includes all bulk terminal facilities in the United States and its territories that have either a total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline. The selected sample size is 93.

EIA-802: Based on the EIA-812 universe, which includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including interstate, intrastate and intracompany pipeline movements. Pipeline companies that transport only natural gas liquids are not included in the EIA-802 frame. Only those pipeline companies that transport products covered in the weekly survey are included. The selected sample size is 65.

EIA-803: Based on the EIA-813 universe, which consists of crude oil pipeline companies (gathering and trunk pipeline companies) in the United States and its territories, all refining companies, all crude oil producers; all terminal operators, all companies transporting Alaskan Crude Oil by water, and all storers of 1,000 barrels or more of crude oil. The selected sample size is 85.

EIA-804: Based on the ERA-60 universe, which includes all importers of record of crude oil and petroleum products into the United States and Puerto Rico. The selected sample size is 65.

EIA-805: Based on the EIA-815 universe, which includes all shippers of unfinished oils and petroleum products into the United States from Puerto Rico. Four companies report.

Sampling Method

The cut-off method is the sampling procedure used for all weekly surveys except the EIA-802, which uses the monthly universe in its entirety. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous 12-month period. Companies are chosen for the sampling, beginning with the largest and adding companies until the total sample covers 90 percent of the total for the previous time period for each product published in the *Weekly Petroleum Status Report*.

Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. The report period closes each Friday at 7 a.m. All canvassed firms and terminal operations companies must file by 5 p.m. on the following Monday.

EN2

Estimation and Imputation

After company reports have been checked and entered into the weekly data base, weekly totals for given products are estimated by using the following formula.

The total reported by all companies for the most recent month (M_t) is divided by the amount reported by the sample of companies for the most recent month (M_s). The result is multiplied by the amount reported by the sample of companies for the current week (W_s). The answer, W_t , is an estimate of the amount that would have been reported by all companies for the current week if all companies reported each week.

$$W_t = \frac{M_t}{M_s} (W_s)$$

This procedure is used to estimate total weekly inputs to refineries and production.

To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Therefore, an exponentially smoothed ratio has been developed. The estimate of weekly imports is the sum of the smoothed ratio multiplied by the weekly values and estimates for shipments from Puerto Rico. Imports of other oils includes an adjustment from Census data for unlicensed products because of coverage differences between the monthly imports data and Census data.

Explicit imputation is done for companies which do not respond in a given week. The imputed values are exponentially smoothed means of recent reports from the specific company.

Response Rates

The response rate for the published estimates is usually between 95 and 98 percent.

Note 1.2: Monthly Petroleum Supply Reporting System (MPSRS)

Background

The MPSRS was implemented in January 1983 as the result of an extensive effort to integrate the collection and processing of petroleum supply data that have been collected on other survey forms for many years. The collection of monthly petroleum supply statistics began as early as 1918 when the Bureau of Mines (BOM) began collecting data on refinery operations and crude oil stocks and movements. The collection systems

were further expanded to include natural gas plant liquids production and storage in 1925, imports of crude oil and petroleum products and storage and movements of petroleum products in 1959, and tanker and barge movements of crude oil and petroleum products in 1964. Since their inception, each survey has undergone numerous changes, but the MPSRS is the first effort to make them all consistent and comparable.

Respondent Frame

EIA-810: All petroleum refineries and plants that produce finished motor gasoline through the mechanical blending of liquids which are operated or controlled in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, the Hawaiian Foreign Trade Zone, and Guam. Approximately 313 respondents report on the EIA-810.

EIA-811: All bulk terminal facilities in the 50 States and the District of Columbia, Puerto Rico, and the Virgin Islands that (a) have a total bulk storage capacity of 50,000 barrels or more and/or (b) receive petroleum products by tanker, barge, or pipeline, regardless of ownership of the material. Approximately 328 respondents report on the EIA-811.

EIA-812: All products pipeline companies that carry petroleum products (including interstate, intrastate and intracompany pipelines) in the 50 States and the District of Columbia. Approximately 94 respondents report on the EIA-812.

EIA-813: All crude oil pipeline companies (gathering and trunk pipeline companies), crude oil producers, companies transporting Alaskan crude oil by water (in excess of 1,000 barrels), and all storers of crude oil, regardless of ownership, in the 50 States and the District of Columbia. Approximately 180 respondents report on the EIA-813.

EIA-815: All licensed importers and importers of record shipping petroleum products from Puerto Rico into the 50 States and the District of Columbia.

Import data from the ERA-60 and EIA-815 are integrated into the import statistics reported in the *PSM*.

EIA-816: All operators of facilities designed to extract liquid hydrocarbons from natural gas stream (natural gas processing plants) or to separate a hydrocarbon stream into its component products, i.e., propane, butane, natural gasoline, etc. (fractionators). Approximately 990 respondents report on the EIA-816.

EIA-817: All known companies and plants that have custody of crude oil and petroleum products transported by tanker and barge between PAD Districts or between PAD Districts and the Panama Canal. There are about 50 respondents.

ERA-60: All licensed importers and importers of record importing crude oil and petroleum products into the

United States and Puerto Rico. The respondent universe consisted of approximately 1,100 firms as of July 31, 1982. However, only a selected 250 importers must report each month regardless of import activity. All others must report only for a month in which they actually had imports. The respondent universe for this survey is updated whenever an import license is granted by the Office of Oil Imports of the ERA.

EIA utilizes a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review industry publications such as the *Oil and Gas Journal* and *LP Gas Almanac* for information on facilities or companies going into operation or closing down. These are augmented by articles in newspapers, letters from respondents indicating changes in status and information received from survey systems operated by other offices.

Every two to three years an extensive survey study is conducted to completely refresh the frames. This involves consolidating information from every known source including State agencies, federal agencies (e.g., EPA, Corps of Engineers, Census Bureau, etc.), and private industry directories. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

Collection Methods

The data for all of the MPSRS surveys are collected monthly. Completed forms are required to be postmarked by the 20th day following the end of the report month, with the exception of the EIA-815 and ERA-60 which are due 15 work days following the end of the report month. Telephone follow-up calls are made to nonrespondents prior to the publication deadline, for their data. An automated mailing list is maintained and is used to monitor receipt of the forms.

Imputing Missing Data

Imputation is performed only for nonresponding companies that submitted reports the previous month. For such companies, previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. In the event that the previous month's data were estimated, the respondent is contacted and requested to submit estimates, if necessary, to be followed by submission of actual data. Data for nonrespondents on the EIA-815 and 817, and ERA-60 are not imputed.

Response Rates

As of the filing deadline, the response rates of the EIA-810 through EIA-813 respondents is over 90 per-

cent. The response rate for the EIA-816 is over 85 percent and for the EIA-817 it is 98 percent. All companies that have not responded are contacted by telephone. Although data are taken by telephone to expedite processing, a certified submission is still required. Names of companies that fail to file for 2 consecutive months are forwarded for further noncompliance action.

In July 1982, the ERA-60 survey had a response rate of 98 percent by the filing deadline. The universe was 1,100 firms at that time. (Because this is a dynamic survey, the universe is constantly changing.) Standard follow-up of nonrespondents is made to insure that all reports are received, since data are not imputed for nonrespondents. In addition, response is cross-checked with response on the Petroleum Licensing Decrementation System (PLDS), a listing of each month's importers. The response rate is generally 98 to 99 percent by the time the data are first published.

Note 1.3: Census Import (IM-145) and Export (EM-522 and EM-594) Data

Background

Each month the EIA purchases magnetic tapes of aggregated import and export statistics from the Bureau of the Census. These data provide the only source of export statistics and are used to augment the import data collected by the EIA. Export statistics and import data from the Census tapes on liquefied petroleum gases, bonded ships bunkers and military offshore use are published in the *PSM*.

Import Statistics (IM-145)

Coverage

The import statistics reflect both government and non-government imports of merchandise from foreign countries into the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico), without regard to whether or not a commercial transaction is involved. In general, the statistics record the physical movement of merchandise into the United States from foreign countries, with the exception of the following types of transactions that are excluded from the statistics:

1. Merchandise in-transit through the United States, when documented with Customs as an in-transit movement.
2. Shipments from anywhere to U.S. possessions and shipments from U.S. possessions to the United States. (U.S. possessions include Puerto Rico, the Virgin Islands, Guam, and American Samoa.)
3. U.S. merchandise that was held in foreign countries by the U.S. Armed Forces and is returned to the United States for the use of the Armed Forces.

Source of Import Information

The official U.S. import statistics are compiled by the Bureau of the Census from copies of the import entry and warehouse withdrawal forms that importers are required by law to file with Customs officials (Customs Forms 7501, 7505, and 7506).

Imported petroleum is reported as *Imports for Consumption*. Imports for consumption are a combination of entries for immediate consumption and withdrawals from warehouses for consumption. With certain exceptions as indicated above, these data generally reflect the total of commodities entered into U.S. consumption channels.

Country and Area of Origin

The country reported in the statistics as the country of origin is defined as the country where the merchandise was grown, mined, or manufactured. In instances where the country of origin cannot be determined, the transactions are credited to the country of shipment.

Export Statistics (EM-522 and EM-594)

Coverage

The export statistics reflect both government and non-government exports of domestic and foreign merchandise from the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico) to foreign countries, without regard to whether or not the exportation involves a commercial transaction. In general, the statistics record the physical movement of merchandise out of the United States to foreign countries, with the exception of the following types of transactions:

1. All shipments from U.S. possessions, regardless of whether the shipments are sent to the United States, to other U.S. possessions, or to foreign countries.
2. Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.
3. Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

Source of Export Information

The official U.S. export statistics are compiled by the Bureau of the Census primarily from copies of Shipper's Export Declarations. Exporters are required to file Shipper's Export Declarations with Customs officials. The only exceptions are those exporters who have been authorized to submit data directly to the Bureau of Census on magnetic tape, punched cards, or monthly Shipper's Summary Export Declarations.

Country and Area of Destination

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

Note 2: Supply

The components of petroleum supply are field production, refinery production, imports, and stock withdrawal or addition:

Field Production is the sum of crude oil production (including lease condensate), natural gas processing plant production, and new supply (field production) of other liquids used by refineries.

Crude oil production is estimated based on data received from State conservation and revenue agencies. For further explanation, see Explanatory Note 3.

Field production of natural gas plant liquids (NGPL), including finished petroleum products, is reported monthly on survey Form EIA-816, *Monthly Natural Gas Liquids Report*. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. For survey description and other detail, see Explanatory Note 1.2.

Refinery Production of LRGs, ethane, and finished petroleum products is reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published production of these products equals refinery production minus refinery input. Refinery production of unfinished oils and of motor and aviation gasoline blending components appears on a net basis under refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. It should also be noted that refineries do not export production of crude oil, natural gasoline, isopentane, unfractionated stream, plant condensate, or other hydrocarbons.

Imports of crude oil and petroleum products are reported monthly on Form ERA-60, *Report of Oil Imports into the United States and Puerto Rico*, and Form EIA-815, *Shipments of Refined Products (Including Unfinished Oils) from Puerto Rico to the United States*. In addition, the Census Bureau Tabulation IM-145 summarizes import data from Customs import declarations reported on Customs Forms 7501 and 7505. The most prominent difference between the EIA and Census systems appears in imports of liquefied petroleum gases

(LPG), where the Census data show a much higher level of imports than EIA data. This occurs because the ERA-60 respondent frame was built by monitoring importers of licensed products and LPGs are not licensed products. Therefore, respondents that import only LPGs have not been identified, and do not report these imports to the Department of Energy. Since these importers are required to file form 7501 with the U.S. Customs Service, EIA obtains data on imports of LPGs from Census Tabulation IM-145. Additional data taken from the IM-145 are relatively small quantities of naphtha- and kerosene-type jet fuels, distillate fuel oils, and residual fuel oils withdrawn from bonded storage for use in international trade and for military offshore use. Even though these duty-free fuels are stored on United States shores, they did not enter the United States for domestic consumption and therefore are not included in the ERA-60 reporting system.

Stock Withdrawal (+) or Addition (-) is calculated by subtracting stocks at the end of the month from stocks at the beginning of the same month. (Note: The beginning stocks of one month are equal to the ending stocks of the previous month.) A positive result (+) would represent a withdrawal from stocks and an increase in petroleum supplies distributed for domestic consumption. A negative result (-) would represent a buildup of stocks and a reduction in the amount of petroleum supplies distributed for domestic consumption. For a description of survey forms used to make stock withdrawal or addition calculations see Explanatory Note 5.

Unaccounted-for Crude Oil is a balancing item that represents the difference between crude oil supply and disposition.

Crude oil supply is the sum of field production, imports and stock withdrawals or additions. Crude oil disposition is the sum of exports, refinery input, losses and product supplied. Unaccounted-for crude oil is calculated by subtracting crude oil supplies from crude oil disposition. A positive result indicates that refiners and exporters reported use of more crude oil than was reported to have been available to them. (This occurs, for example, when imports are undercounted due to late reporting or other problems.) A negative result would indicate that more crude oil was reported to have been supplied to refiners and exporters than they reported used.

Note 3: Domestic Crude Oil Production

Data for the Crude Oil Production System (COPS) are reported to the Department of Energy by each of the State conservation agencies, which collect crude oil production values for tax purposes. The U.S. Geological Survey reports the volume of crude oil that is produced offshore in Federally-owned waters. With the exception of ten State conservation agencies, all of these reports are received monthly. After each calendar year, these monthly numbers are updated using the annual reports

from the State conservation agencies and the U.S. Geological Survey. The ten States that do not report monthly values are Indiana, Kentucky, Missouri, Arkansas, Utah, New York, Ohio, Pennsylvania, West Virginia, and Wyoming. Monthly values are estimated for these States using the individual linear trends of their historical annual crude oil production values.

There is a time lag of approximately 4 months between the end of the reporting month and the time when the monthly COPS information becomes available. Table 11 of this publication provides information on crude oil production for the most recent month for which COPS values are available. In order to present more timely crude oil production values, the EIA's Dallas Field Office prepares a series of State level estimates which are based on historical production patterns and are summed to obtain the monthly crude oil production values shown in the summary statistics of this publication.

The individual State level estimates are either exponential curve fitted projections based on recent data or are constant level projections based on the average production rate during a recent time period. In some cases, adjustments are made to these estimates based on additional information on expected changes in production rates supplied by a State agency, a trade association, or an individual field operator.

Note 4: Disposition

The components of petroleum disposition are crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

Crude Oil Losses is the sum of crude oil losses at refineries. Crude oil losses at refineries are reported on Form EIA-810, *Refinery Report*.

Refinery inputs of crude oil, natural gas plant liquids, and other liquids are reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published inputs of unfinished oils and of motor and aviation gasoline blending components equal refinery input minus refinery output. Refinery inputs of finished petroleum products are reported on a net basis under refinery production.

Exports of crude oil and petroleum products are compiled from Census Bureau tabulations EM-522 and EM-594. Exports include crude oil shipments to Puerto Rico, the Virgin Islands, and the Hawaiian Foreign Trade Zone, which are obtained from refinery receipts reported on Form EIA-810, by refineries located in these places.

Product supplied for each product is calculated by summing field production plus refinery production, plus imports, plus stock withdrawal or minus stock addition, minus crude oil losses (plus net receipts when calculated on a PAD District basis), minus re-

finery input, minus exports. This formula ensures that total disposition equals total supply.

Products supplied indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of that product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported, (2) data were misreported or reported late, (3) In the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of interdistrict movements was incomplete.

Product supplied for crude oil is the sum of crude oil burned on leases and by pipelines as fuel oil. These data are reported on EIA-813, *Monthly Crude Oil Report*. Prior to January 1983, crude oil burned on leases and by pipelines as fuel oil were reported as either distillate or residual fuel oil and included in product supplied for these products.

Note 5: Stocks

Primary stocks of crude oil are the sum of ending stocks reported monthly on Form EIA-810, *Monthly Refinery Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Crude oil held in the Strategic Petroleum Reserve is included unless otherwise noted. Alaskan crude oil in transit is also included. Stocks of crude oil are also reported weekly on Form EIA-800, *Weekly Refinery Report*, and on Form EIA-803, *Weekly Crude Oil Stocks Report*. Primary stocks of petroleum products are summed from data reported on Form EIA-816, *Monthly Natural Gas Liquids Report*, Form EIA-811, *Monthly Bulk Terminal Report*, and on Form EIA-812, *Monthly Product Pipeline Report*. Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or stocks held by consumers. Petroleum product stocks are also reported weekly on Form EIA-800, *Weekly Refinery Report*, Form EIA-801, *Weekly Bulk Terminal Report*, and Form EIA-802, *Weekly Crude Oil Stocks Report*. For survey descriptions and other details, see Explanatory Notes 1.1 - 1.3.

Note 6: Average Stock Levels

The graphs displaying monthly stock levels of crude oil, motor gasoline, distillate fuel oil, residual fuel oil, liquefied petroleum gases, and other products provide the user with recent data as well as a summary of data from January through December or from July through June for the most recent 3-year period. This summary takes the form of an *average range* that includes seasonal variation determined from a longer time period. The

average range represents the historical pattern; it is not a forecast.

These curves are updated semiannually (on January 1 and July 1), by basing the *average ranges* on a more recent time period. Each 3-year data series is adjusted by dropping the first 6 months and including the most recent 6 months.

For each data series, the monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of the Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive. The series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported stock levels. The intent of deseasonalization is to remove only seasonal variation from the data. Thus, a deseasonalized series would contain the same trends and irregularities as the original data. For crude oil stocks, the derived seasonal factors are very small relative to crude oil stock levels. Therefore, the seasonal factors for distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products are derived using monthly data from 1974-1980. For motor gasoline, the seasonal factors are based on monthly data from 1975, 1976, 1978, 1979 and 1980. In 1977, there was virtually no seasonal behavior in motor gasoline stocks. Monthly stock levels stayed at the same high level for the entire year. In addition, the seasonal patterns in 1973, 1974 and 1977 were not representative of the recent past, and these years were not used in the determination of seasonal patterns for motor gasoline stocks. Because of these differences in the year-to-year seasonal fluctuation of motor gasoline, the evidence for the illustrated seasonal patterns for crude oil, distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products is stronger than is the evidence for the illustrated seasonal patterns for motor gasoline.

In some cases, these seasonal patterns do not show a smooth transition from month to month. For example, the June factor for residual fuel oil is slightly less than the May and July values, making a bump in the curve. As there is little difference in the magnitude of these seasonal factors, it is possible that this variation is due to the small number of observations (7 years) and the data variability.

After seasonal factors are derived, the most recent 3-year period (from January through December or from July through June) is deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard error of the deseasonalized 36 months is calculated adjusting for extreme data points. The width of the *average range* is twice this standard error.

The upper curve of the *average range* is defined as the average plus the seasonal factors plus the standard error. The lower curve is defined as the average plus the seasonal factors minus the standard error.

Note 7: Movements

Movements of crude oil between PAD Districts are reported on Form EIA-817, *Monthly Tanker and Barge Movement Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Petroleum product movements are reported on Forms EIA-817 and EIA-812, *Monthly Product Pipeline Report*. Net receipts is the difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge. For survey descriptions and other detail, see Explanatory Note 1.2.

Note 8: Preliminary Monthly Statistics

Weekly data (Forms EIA-800, 801, 802, 803, and 804) are used to estimate the most recent monthly values for the *Summary Statistics* section. Since some of the weekly reporting periods overlap two adjacent months, it is necessary to use weighting factors in the calculation of the monthly values.

To estimate crude oil and petroleum product imports, crude oil input to refineries and production of petroleum products for a specific month, the weekly estimates are weighted by the number of days of that month included in each week, then summed.

End-of-month stock levels of crude oil and the major products (motor gasoline, distillate fuel oil, and residual fuel oil) are calculated in a similar manner, but use only the two weekly reporting periods that cover the end-of-week stocks before and after the end of the month. The end-of-month stock level is calculated by first calculating the stock change between the two weeks. The daily stock change between the two end-of-week stock levels is then calculated. This number is multiplied by the weighting factor of the earlier of the two weeks (the week that covers the last day of the month of interest). This change is added to the earlier of the two end-of-week stock levels to estimate the end-of-month stock level.

Preliminary monthly estimates of domestic crude oil production are calculated as described in Explanatory Note 3.

Note 9: Notes on Tables

Note 9.1 Crude Oil and Petroleum Products Overview statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Crude Oil and Petroleum Products Stock Withdrawal (+) or Addition (-), Petroleum Products Supplied, Total Imports, Crude Oil Imports, Total Exports, and Crude Oil Exports appear as labeled in Table 4. Total Production and Crude Oil Production appear under Field Production in Table 4.

- Natural Gas Plant Production is the sum of Natural Gas Liquids and Finished Petroleum Products Field Production in Table 4.

- Petroleum Products Imports is the sum of Natural Gas Liquids and LRGs, Other Liquids, and Finished Petroleum Products Imports in Table 4.

- Total Crude Oil and Petroleum Products Ending Stocks appear in thousands of barrels in Table 2.

Note 9.2 Crude Oil Supply and Disposition statistics on the referenced line appear in Table 1 of the Detailed Statistics, except where noted.

- Total Domestic Field Production, Alaskan Field Production, SPR Imports, Other Imports (synonymous with Imports Gross Excl. SPR), SPR and Other Primary Stocks Withdrawal (+) or Addition (-), Unaccounted For Crude Oil, Refinery Inputs, and Exports appear as labeled in Table 1.

- Crude losses and Product Supplied appear as labeled in Table 2.

- SPR Ending Stocks and Other Primary Ending Stocks (synonymous with stocks excluding SPR) appear in thousands of barrels in Table 1.

- Total Crude Oil Ending Stocks appear in thousands of barrels in Table 2.

- Total Imports appear in Table 4.

Note 9.3 Finished Motor Gasoline Supply and Disposition statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Unleaded Percent of Total Product Supplied represents the ratio of finished unleaded motor gasoline product supplied to total finished motor gasoline product supplied, multiplied by 100 and rounded to the nearest tenth.

- Ending Stocks appear in thousands of barrels in Table 2.

Note 9.4 Distillate and Residual Fuel Oil Supply and Disposition statistics on the referenced lines appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Ending Stocks appear in thousands of barrels in Table 2.

Note 9.5 Liquefied Petroleum Gases Supply and Disposition statistics represent the aggregation of statistics on ethane, propane, butane, butane-propane mixtures, ethane-propane mixtures, and isobutane. The statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stocks Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied appear as labeled in Table 4.

- Ending stocks appear in thousands of barrels in Table 2.

Note 9.6 Other Petroleum Products Supply and Disposition statistics represent the aggregation of statistics on natural gasoline, isopentane, unfractionated stream, plant condensate, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, and residual fuel oil. The statistics on the referenced line are aggregated from Table 4 of the Detailed Statistics, except where noted.

- Total Production is the aggregated sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied are aggregated from Table 4.

- Ending stocks are aggregated from ending stocks in thousands of barrels in Table 2.

Note 9.7 Table 1. U.S. Petroleum Balance

- Lines (1) through (3): Crude oil (including lease condensate) production for *Alaska, Lower 48 States*, and *Total U.S.* are calculated by calling the conservation agency in Alaska for Alaskan crude oil production during the month, estimating crude oil production in the United States (see Explanatory Note 3), and taking the difference to equal production in the Lower 48 States.

- Line (5): *SPR Imports* are reported on Survey Form ERA-60.

- Line (12): *Total Other Sources* equals crude oil stock withdrawal (+) or addition (-) plus unaccounted for crude oil minus crude losses in Table 2.

- Line (14): Natural gas plant liquids (NGPL) *Production* equals field production of natural gas liquids (NGL) plus field production of finished petroleum products in Table 2.

- Line (15): *NGPL Imports* equals the sum of the im-

ports of natural gasoline and isopentane, unfractionated stream, and plant condensate imports in Table 2.

- Line (16): *NGPL Stock Withdrawal (+) or Addition (-)* is equal to the sum of stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate in Table 2.

- Line (17) equals the sum of lines (14), (15), and (16).

- Line (18): Unfinished oils and gasoline blending components *Stock Withdrawal (+) or Addition (-)* equals stock withdrawal (+) or addition (-) for other hydrocarbons and alcohol, for unfinished oils, motor gasoline blending components, and aviation gasoline blending components.

- Line (20): *Other Hydrocarbons and Alcohol New Supply* equals the field production of same in Table 2.

- Line (21): *Refinery Processing Gain* is a balancing item equal to total refinery production minus total refinery input in Table 2.

- Line (23): *Total Other Liquids* equals the sum of lines (18) through (22).

- Line (24): *Total Production of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; plus crude oil product supplied in Table 2.

- Line (25): *Gross Imports of Refined Products* equals imports of LPG plus imports of finished petroleum products in Table 2.

- Line (26): *Exports of Refined Products* equals exports of LPG plus exports of finished petroleum products in Table 2.

- Line (27): *Net Imports of Refined Products* equals the difference between lines (25) and (26).

- Line (28): *Total New Supply of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; minus crude oil product supplied plus imports of LPG and finished petroleum products; minus exports of LPG and finished petroleum products in Table 2.

- Line (29): *Refined Products Stocks Withdrawal (+) or Addition (-)* equals the sum of stock withdrawal (+) or addition (-) for LPG and finished petroleum products in Table 2.

- Line (30): *Total Petroleum Products Supplied for Domestic Use* equals total products supplied in Table 2.

- Lines (31) through (35) equal the respective products supplied in Table 2.

- Line (36): *Other Products Supplied* equals the sum of natural gasoline and isopentane, unfractionated stream, plant condensate, aviation gasoline, naphtha < 400 Deg. F for petrochemical feedstock use, other oils > 400 Deg. F. for petrochemical feedstock use, special naphthas, lubricants, waxes, coke, asphalt, road oil, still gas, unfinished oils, motor gasoline blending components, aviation gasoline blending components and miscellaneous products supplied in Table 2.

- Line (37): *Total Product Supplied* is equal to total products supplied in Table 2.

- The sum of lines (38) and (39), stocks of *Crude Oil and Lease Condensate (Excluding SPR)* and stocks held by the *Strategic Petroleum Reserve*, equals ending stocks of crude oil in Table 2. SPR stocks are reported on Form EIA-813.

- Line (43): stocks of *Refined Products*, equals the sum of LPG and finished petroleum product stocks in Table 2.

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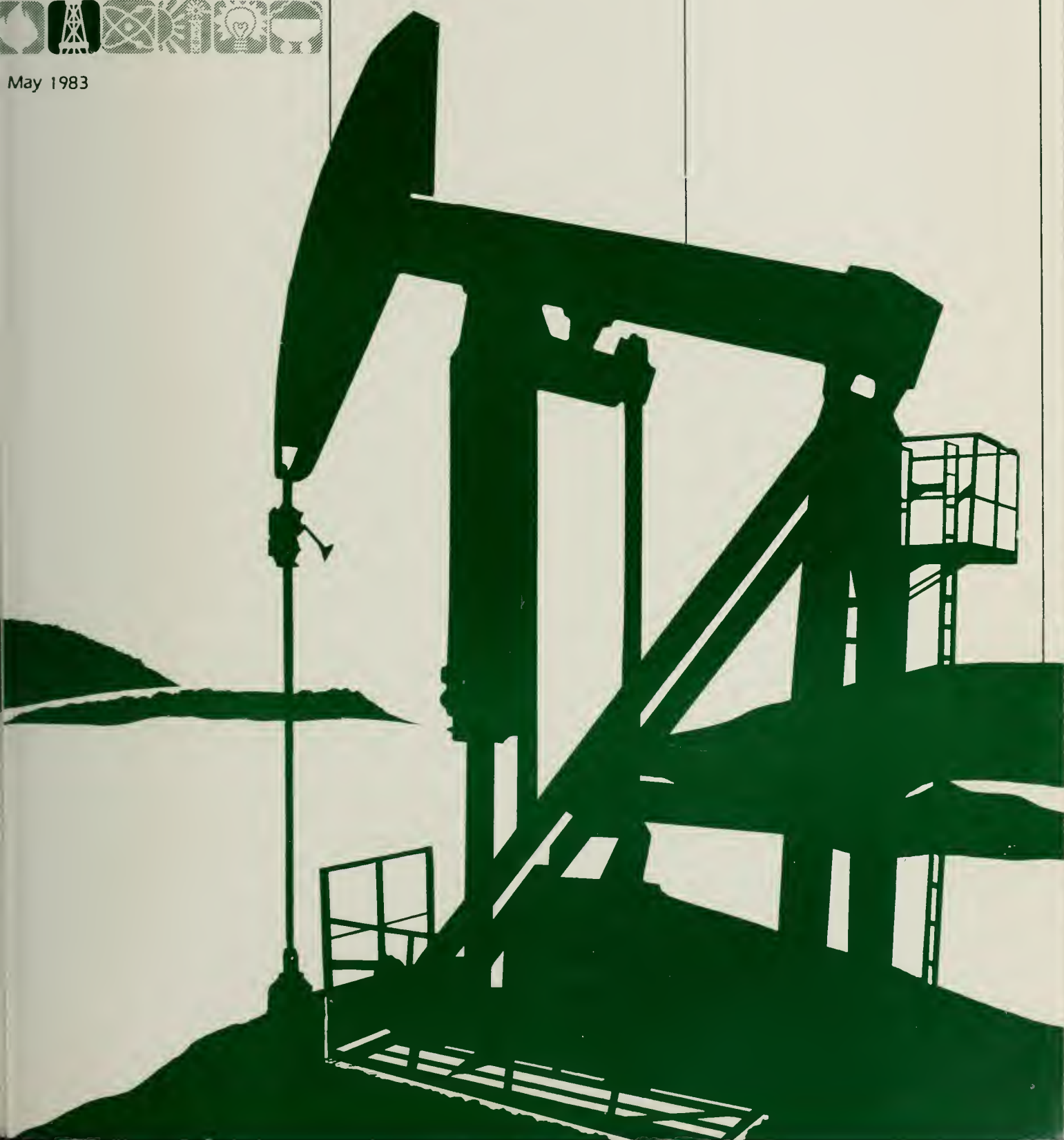
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Petroleum Supply Monthly



May 1983



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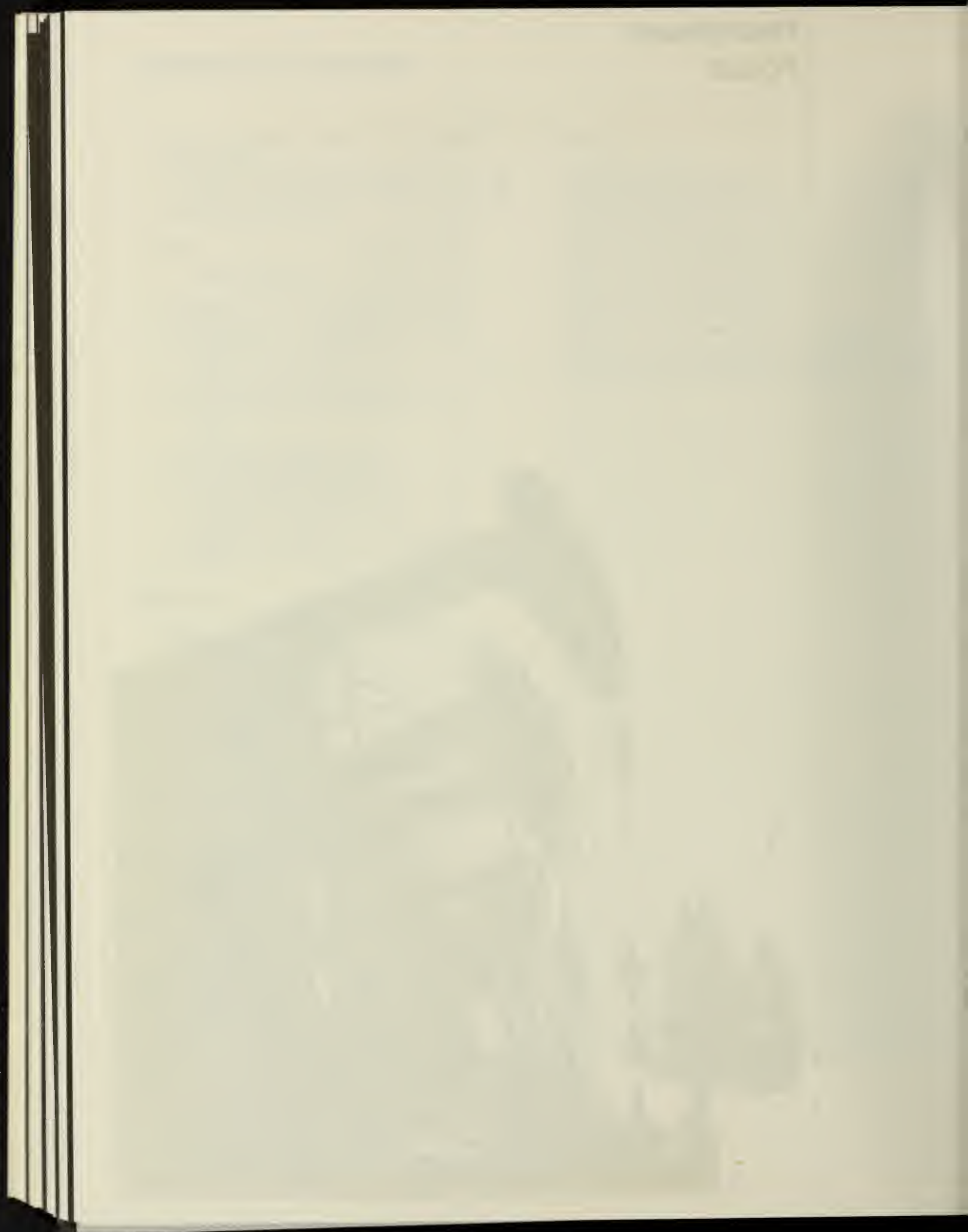
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Petroleum Focus





Petroleum Supply Summary

Average Volume for Period (Million Barrels Per Day)	April			Cumulative January Through April		
	1983	1982	% Change	1983	1982	% Change
Total Product Supplied	14.8	16.0	- 7.7	15.0	15.9	- 5.6
Motor Gasoline	6.5	6.9	- 5.1	6.4	6.4	- 0.4
Distillate Fuel Oil	2.7	3.0	- 9.6	2.8	3.1	- 10.2
Residual Fuel Oil	1.5	1.9	- 20.7	1.5	2.0	- 24.3
Crude Inputs to Refineries	11.6	11.4	1.6	11.0	11.4	- 3.1
Crude Oil and Natural Gas Liquids Production	10.2	10.2	- 0.5	10.2	10.2	0.3
Net Imports ¹	3.7	3.5	5.5	3.2	3.8	- 17.0
Net Crude Oil Imports ²	2.6	2.4	5.8	2.2	2.6	- 15.7
SPR Imports	0.2	0.2	7.4	0.2	0.2	16.5
Net Product Imports	0.9	0.9	3.9	0.8	1.0	- 26.0
Crude Oil Stock Withdrawal ²	- 0.39	0.34	—	- 0.17	0.11	—
Product Stock Withdrawal	0.19	1.59	—	0.99	1.26	—
Stocks at End of Period (Million Barrels)						
Crude Oil ²	365	355	NM			
Motor Gasoline ³	222	223	NM			
Distillate Fuel Oil	103	109	NM			
Residual Fuel Oil	43	54	NM			
Total Product	692	739	NM			
SPR	318	256	NM			
Total	1,375	1,350	NM			

¹Gross imports of crude oil including Strategic Petroleum Reserve (SPR) and petroleum products less exports of crude oil and petroleum products.

²Excluding SPR.

³Including blending components.

NM = Not meaningful due to new stock basis.

Note: Percent changes are based on unrounded values. April 1983 data are estimates based on weekly data, except for export and Natural Gas Liquids Production estimates which are March 1983 monthly values. Totals may not be equal to sum of components due to independent rounding.

Source: Energy Information Administration, *Petroleum Supply Monthly*, May 1983.

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Summer Gasoline Overview

Motor gasoline demand during the summer 1983 driving season (June, July, and August) is projected to fall slightly short of 1982 levels. An increase in vehicle miles traveled is expected because of lower gasoline prices relative to 1982 and economic recovery. However, improvements in automobile efficiency (more miles traveled per gallon of fuel consumed) will more than offset the added mileage. Although the spring drawdown of motor gasoline stocks began earlier this year than in 1982, the lower stock level is a continuation of the trend over the past 2 years. Because the United States has ample excess refining capacity and crude oil stocks are readily available, no disruptions in motor gasoline supplies are anticipated for the 1983 summer driving season.

According to the Energy Information Administration's *Short-Term Energy Outlook* (February 1983),¹ the range for motor gasoline demand (product supplied) for the summer driving season of 1983 is from 6.5 million to 6.7 million barrels per day. The projected consumption levels are based upon average prices that range from \$1.11 to \$1.32 per gallon for motor gasoline (see Figure 1). Reductions in crude oil prices by Organization of Petrole-

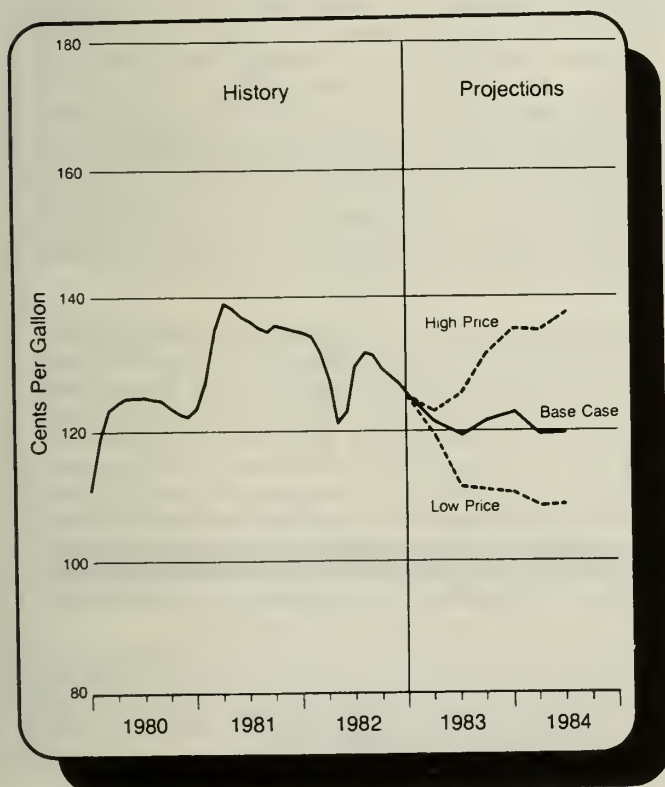
um Exporting Countries (OPEC) members and other major oil-producing nations accompanied a progressive weakening of petroleum demand during the past 2 years. During the summer driving season, retail motor gasoline prices are expected to remain at or below the comparable 1982 levels, despite a 5-cent-per-gallon federal tax increase that became effective April 1 of this year.

In addition to price, gasoline demand is affected by the number of miles traveled by gasoline-powered vehicles and the fuel efficiency of these vehicles. During 1982, average passenger car miles traveled increased significantly for the first time in several years, responding to lower real fuel costs per mile and higher disposable incomes. However, the increase in travel did not lead to an increase in gasoline consumption because the average fuel efficiency of the automobile stock increased as older, heavier cars were retired and newer, lighter cars were added. Also, there was an increasing number of diesel automobiles in the stock. A decrease in the real fuel cost per mile of travel and increases in consumers' disposable income and economic activity are expected to contribute to a further increase in passenger car miles traveled during 1983.

Sources of motor gasoline supplies are refinery production, net imports, and withdrawals from inventories. Refinery production is the major source of gasoline. During the summer of 1982, refinery utilization averaged 73.5 percent of capacity, and gasoline production was equal to more than 98 percent of demand.² During the first week of May 1983, stocks of crude oil were slightly above comparable 1982 levels.³ Thus, if needed, there are sufficient crude oil stocks for substantial increases in refinery utilization from the 66.4 percent utilization rate during the first quarter of this year.⁴

During the 1982 summer driving season, motor gasoline net imports averaged about 200,000 barrels per day. The combined contribution of refinery production and net imports of motor gasoline during the summer of 1982 exceeded demand by about 150,000 barrels per day.⁵ Consequently, inventories grew slightly during the summer.

Figure 1. Retail Motor Gasoline Prices
(Current Dollars)



Source: Energy Information Administration, *Short-Term Energy Outlook*, DOE/EIA-202(83/1Q), February 1983.

¹Energy Information Administration, *Short-Term Energy Outlook*, DOE/EIA-202 (83/1Q), February 1983.

²Energy Information Administration, *Petroleum Supply Monthly*, DOE/EIA-0109 (82/8, 9, and 10), August, September, and October 1982, Tables 15 and 4.

³Energy Information Administration, *Weekly Petroleum Status Report*, DOE/EIA-0208 (83/19), May 13, 1983, U.S. Petroleum Balance Sheet.

⁴Energy Information Administration, *Petroleum Supply Monthly*, DOE/EIA-0109 (83/3, 4, and 5), March, April, and May 1983, Table 13.

⁵Energy Information Administration, *Petroleum Supply Monthly*, DOE/EIA-0109 (82/8, 9, and 10), August, September, and October 1982, Table 21.

Thus far in 1983, motor gasoline has been imported at about the same rate as during the comparable period in 1982. Motor gasoline inventories during the first week of May 1983 were similar to 1982 levels. The withdrawal of gasoline from inventories appears to be following the 1982 pattern, but about 2 weeks earlier.⁶ On the

premise that refinery production and imports activity will be increased to comparable 1982 levels, supplies of motor gasoline are expected to be adequate to meet summer demand.

⁶Energy Information Administration, *Weekly Petroleum Status Report* DOE/EIA-0208 (83/19), May 13, 1983, pp. 8 and 9.

Principal Factors Influencing Motor Gasoline Demand

Principal factors influencing motor gasoline demand (product supplied) include total vehicle miles traveled and vehicle efficiency (miles traveled per gallon of gasoline used). As vehicle miles traveled increase, gasoline demand would be expected to increase. However, fuel efficiency improvements in the automobile stock, including dieselization, produce downward pressure on gasoline demand. The interaction between these two factors impacts gasoline demand trends. Gasoline price is one of the underlying factors that influences the number of miles traveled and the rate of improvement in overall automotive fuel efficiency.

Automobile Usage and Gasoline Prices

Since the oil embargo of the early 1970's, rising gasoline prices have stimulated consumer efforts to economize on gasoline usage. These conservation efforts are reflected in Federal Highway Administration (FHWA) data on average miles traveled per passenger automobile. The relationships among price, average miles traveled per passenger car, and average miles traveled per gallon of gasoline consumed for passenger cars are shown in Figure 1. Declines in average miles traveled per passenger car observed in the early 1970's and again between 1978 and 1980 reflect rises in real gasoline prices during those years. As can be observed, periods of declining prices are generally reflected by increased travel.

The relationship is also apparent when an index of real gasoline cost per mile (real price/passenger car miles per gallon) is compared to miles traveled. Rising incomes coupled with lower prices relative to 1982 are expected to further stimulate driving activity this summer.

The Oak Ridge National Laboratory (ORNL) Transportation Energy Group studied cyclical patterns associated with gasoline demand.¹ The study showed that gasoline demand typically follows a cyclical pattern with a summer peak exceeding the winter trough by 10 to 15 percent. This pattern is attributed principally to vacation and recreational travel, off-highway gasoline use in recreational boating, agriculture, and small engine

equipment, such as lawnmowers. The study also indicated that the seasonal component of gasoline demand (differences between summer peaks and winter troughs) appeared to have narrowed during the past decade. The narrowing of the seasonal difference between the peak and trough indicates that it is no longer necessary to build stocks to levels of earlier years at the beginning of the peak driving season.

Efficiency Improvements

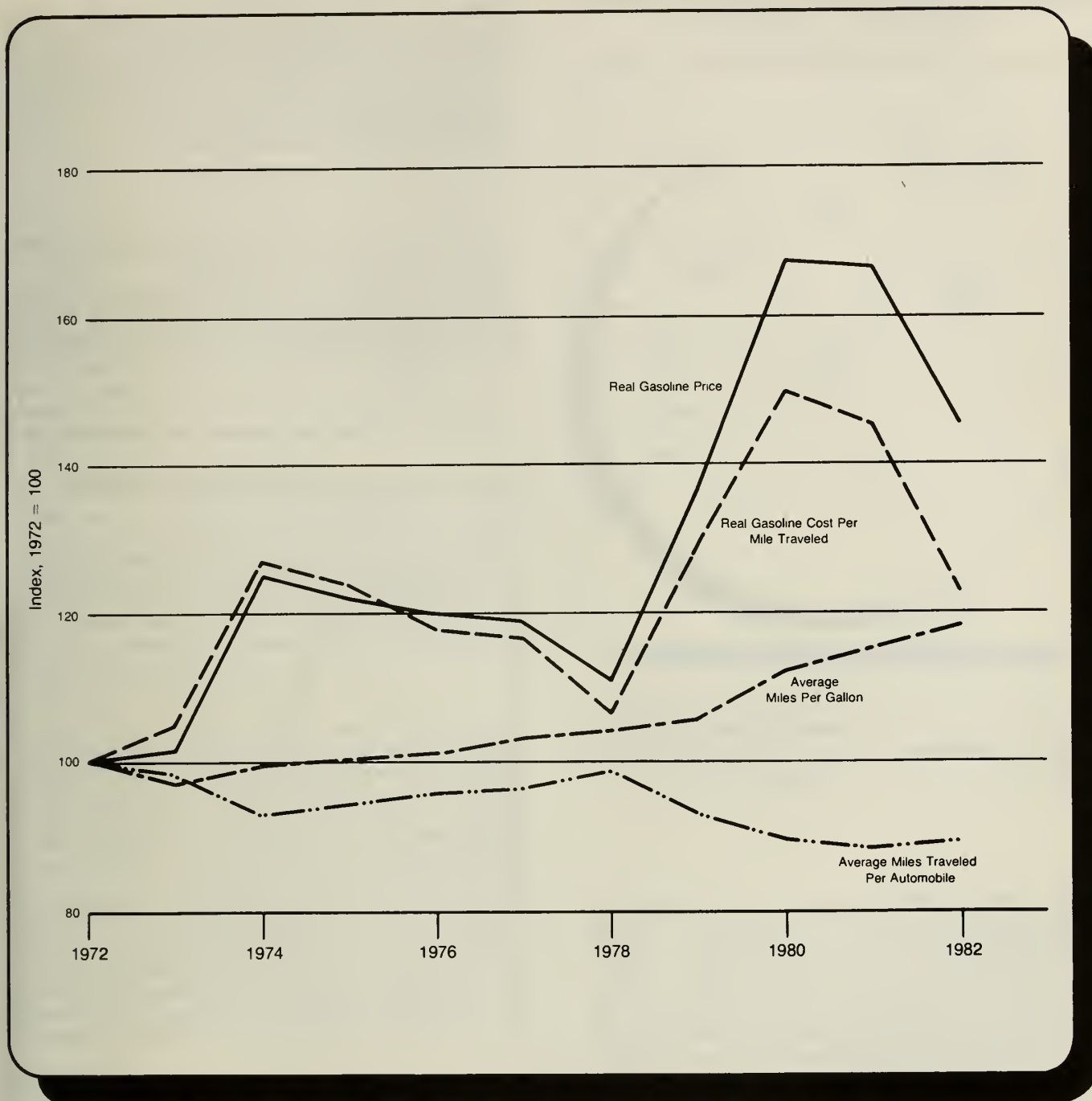
Gasoline price increases during the past decade have stimulated consumer demand for smaller, more fuel efficient cars. Changes in vehicle fuel efficiency resulting from the Corporate Average Fuel Economy (CAFE) Standards established by the Energy Policy and Conservation Act of 1975 (P. L. 94-163) have magnified the gains in fuel efficiency resulting from market shifts from large to smaller vehicle size categories. A recent Department of Transportation (DOT) study² attributed over 80 percent of new car fuel efficiency gains to engineering and design changes, particularly overall weight reduction, reduced horsepower, transmission changes, aerodynamics, and dieselization (see Figure 2).

Vehicle stock turnover, with new car sales and retirements of older vehicles, gradually improves overall auto stock fuel efficiency. The magnitude and rate of these improvements hinge upon the efficiency of vehicles introduced compared to the efficiency of those withdrawn and the rate of vehicle turnover. Consumers can respond to gasoline price changes more readily by adjusting miles traveled than by exchanging automobiles. In other words, as prices change, consumers usually respond by adjusting miles traveled within the same year; but auto efficiency improvements through vehicle stock turnover are a longer term response.

¹Oak Ridge National Laboratory, Transportation Energy Group, *Summer Peak Gasoline Demand: Analysis and Outlook*, Oak Ridge, Tennessee, March 1983.

²U.S. Department of Transportation, National Highway Traffic Safety Administration, *Automotive Fuel Economy Program, Sixth Annual Report to the Congress*, Washington, D.C.; January 1982.

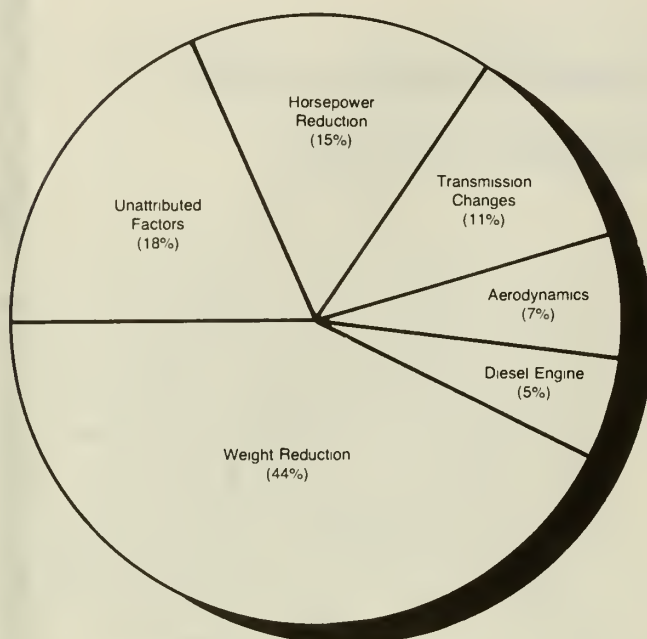
Figure 1. Trends in Passenger Automobile Travel and Motor Gasoline Costs



Sources: Motor gasoline prices—1972, *Platt's Oil Price Handbook and Oilmanac*; 1973, Federal Energy Administration; 1974-1982, U.S. Department of Labor, Bureau of Labor Statistics. Average miles per gallon and passenger car miles traveled—1972-1981, from data published by U.S. Department of Transportation, Federal Highway Administration (FHWA) in *Highway Statistics*, Table VM-1; 1982 data are estimates based upon FHWA preliminary data on total vehicle miles traveled, from *Traffic Volume Trends*.

Figure 2. New Car Fuel Efficiency Improvement, 1978-1981.

(5.3 Miles Per Gallon Total Increase)



Source: U.S. Department of Transportation, National Highway Traffic Safety Administration.

From 1979 to 1982, annual new automobile sales dropped 26 percent, (from 10.7 million to 7.9 million units), and automobile retirements declined approximately 30 percent over the same period.³ In recent years, the low rate of growth in real disposable personal income, high interest rates for new car loans, and high unemployment have constrained automobile sales and slowed down vehicle scrappage. Higher used car prices and lower vehicle depreciation rates have also retarded vehicle scrappage. An ORNL Transportation Energy Group study⁴ indicates that pre-1979 used cars lost an average of 26 percent of their market value per year, but that the post-1979 rate averaged only 18 percent per year. Estimated survival curves for 1978 and 1982 models are presented in Figure 3. As can be observed the curve for the 1978 model is steeper, indicating a faster

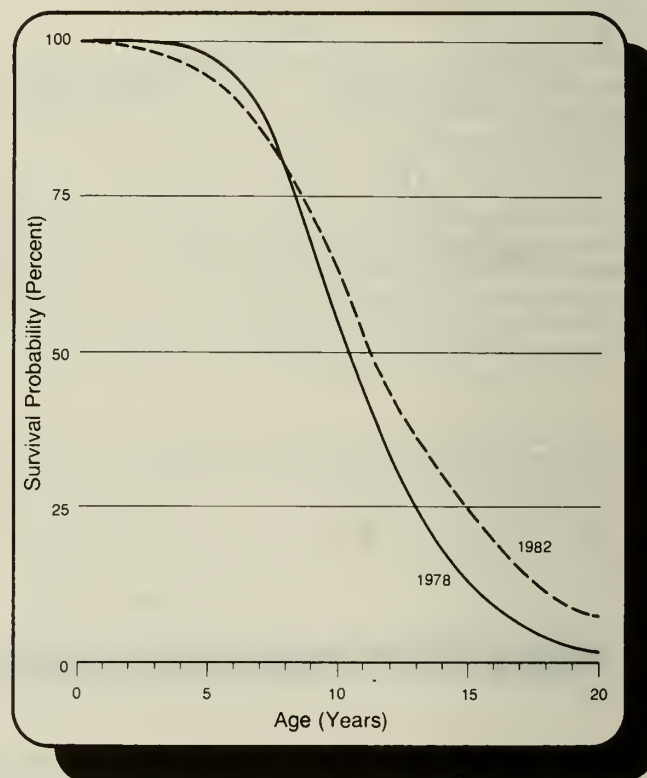
rate of vehicle retirement. Median expected lifetime (the time by which 50 percent of all cars for a given model year will be scrapped) is 1 year longer for the 1982 model than the 1978 model. Improving economic conditions may reverse this trend and stimulate vehicle turnover. However, the rate of improvement in automotive stock efficiency will also be influenced by mandatory standards and by market demand for fuel efficiency improvements, including dieselization.

³Ward's Automotive Yearbook, 1982. Ward's Communications, Inc., Detroit, 1982. (1982 automobile retirements based on data from R.L. Polk and Co., Detroit.)

⁴Oak Ridge National Laboratory, Transportation Energy Group, *Analysis of Vehicle Stock Dynamics, New Car Fuel Economy, and Automotive Fleet Fuel Economy*, Oak Ridge, Tennessee, March 1983, Page 13.

Figure 3. Expected Passenger Car Survival

(1978 and 1982)



Source: Oak Ridge National Laboratory, Transportation Energy Group, Oak Ridge, Tennessee.

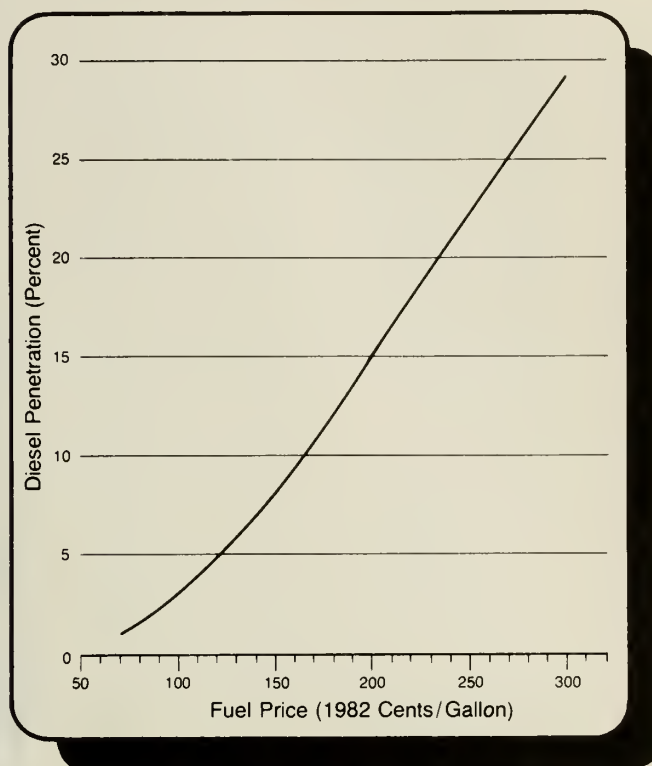
Diesel Penetration of the Automobile Market

Diesel engines have become an important option for improving fuel efficiency, especially in larger vehicles. The ORNL Transportation Energy Group estimates that diesel engines are about 25 percent more energy efficient than gasoline engines in comparable vehicles.⁵ In vehicles that rapidly accumulate mileage, an additional advantage of diesel engines is their durability. However, because of their complex fuel system and greater strength requirements, diesel engines have a higher initial cost than gasoline engines. Market shifts from gasoline to diesel engines depend upon the willingness of purchasers to make the trade-off between higher initial cost and anticipated fuel savings. The price of gasoline, price differences between gasoline and diesel fuels, relative fuel economies, relative resale values, and expectations about future price movements factor into a trade-off decision. Vehicle purchasers will also balance negative attributes they may associate with diesels, such as noise, smell, sluggish performance, and inconvenience, against the positive attributes of overall economy and longevity.

The ORNL Transportation Energy Group has estimated diesel market penetration as a function of fuel price,⁶ assuming no difference between gasoline and diesel fuel prices (see Figure 4). This analysis is based on the consumer cost/efficiency trade-off. The total cost for equipment and negative consumer valuation for a diesel-powered vehicle is estimated to be \$1,800 more than for a comparable gasoline-powered automobile. This total additional cost was estimated from the 1982 observed market penetration.

In recent years, declines in gasoline prices and in the price differential between gasoline and diesel fuel have been reflected in diesel-powered automobile sales. After rising rapidly for 4 years, diesel auto sales fell from over 500,000 units or 6 percent of total sales in 1981 to under 400,000 units or 5 percent of total 1982 sales.⁷ Diesel passenger cars accounted for less than 2 percent of the U.S. personal use auto stock in 1981.⁸ Under a continuation of current conditions, a significant penetration of the passenger vehicle market by diesel-powered vehicles is not expected in the short term. However, if fuel prices increase, if the price of gasoline rises substantially relative to diesel-fuel, or if gasoline supplies become inadequate, demand for diesel-powered passenger vehicles could increase significantly.

Figure 4. Estimated Diesel Penetration of the New Car Market



Note: This figure is based on an assumption of no price difference between gasoline and diesel fuel.

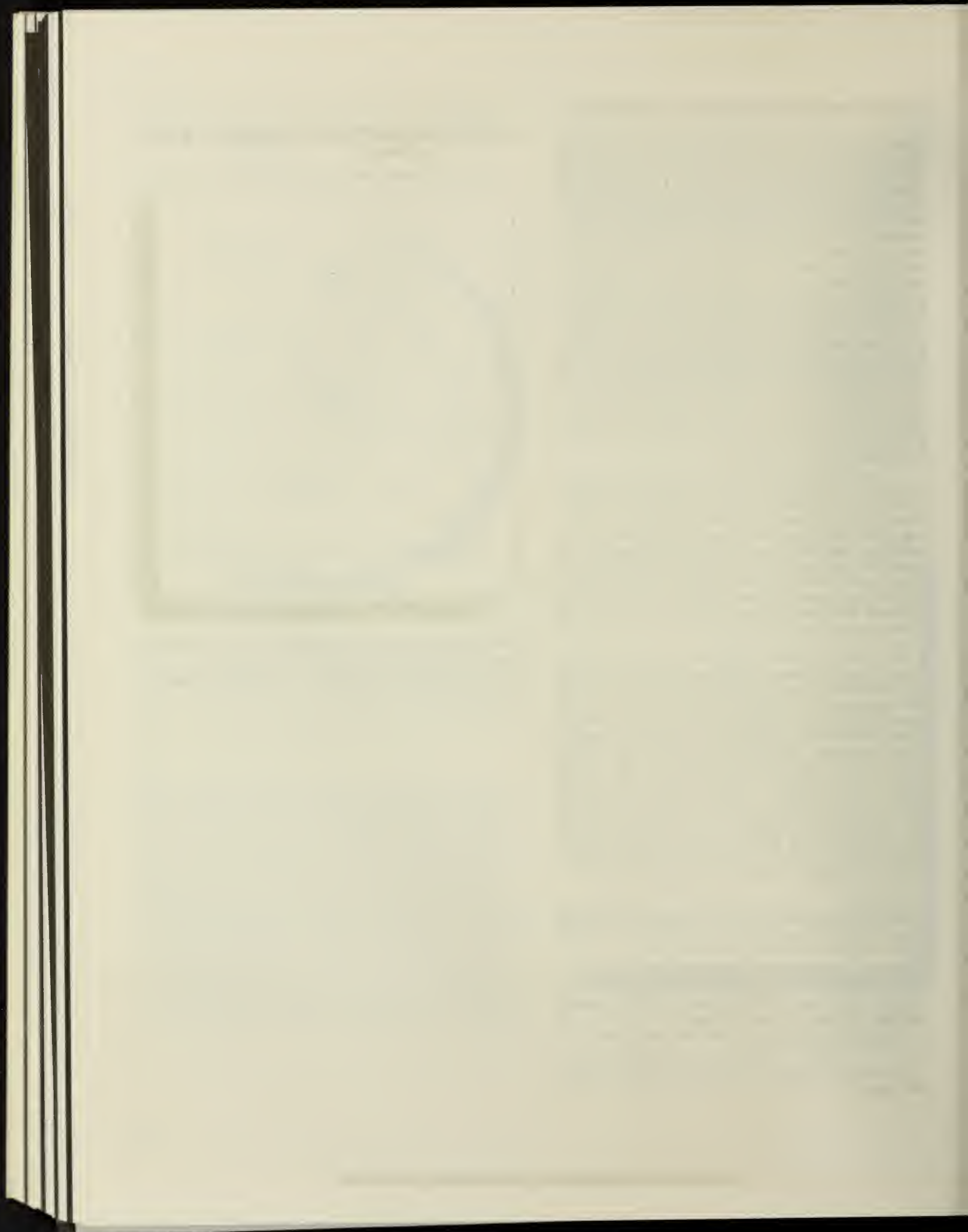
Source: Oak Ridge National Laboratory, Transportation Energy Group, Oak Ridge, Tennessee.

⁵Oak Ridge National Laboratory Transportation Energy Group, *Trends in Gasoline Costs, Dieselization, and Vehicle Usage*, Oak Ridge, Tennessee, March 1983, Page 6.

⁶Oak Ridge National Laboratory, Transportation Research Group, *Projections of New Automobile and Light Truck Fuel Economy, Dieselization, and the Outlook for Gasoline Demand*, Oak Ridge, Tennessee, March 1983, Page 25.

⁷Ward's Automotive Yearbook and Ward's Automotive Reports, Ward's Communications, Inc.

⁸The Power Newsletter, J.D. Power and Associates, January 1982, Page 2.



Summary Statistics



Crude Oil¹ and Petroleum Products Overview

		Field Production			Stock Withdrawal ²			Ending Stocks ³
		Total Domestic ⁴	Crude Oil	Natural Gas Plant Production	Crude Oil ⁵	Petroleum Products	Petroleum Products Supplied	Crude Oil ⁵ and Petroleum Products
								Millions of Barrels
Thousand Barrels per Day								
1973	AVERAGE	10,975	9,208	1,738	11	-146	17,308	1,008
1974	AVERAGE	10,498	8,774	1,688	-62	-117	16,653	⁶ 1,074
1975	AVERAGE	10,045	8,375	1,633	-17	-145	16,322	1,133
1976	AVERAGE	9,774	8,132	1,603	-39	96	17,461	1,112
1977	AVERAGE	9,913	8,245	1,618	-170	-378	18,431	1,312
1978	AVERAGE	10,328	8,707	1,567	-78	172	18,847	1,278
1979	AVERAGE	10,179	8,552	1,584	-148	-25	18,513	1,341
1980	AVERAGE	10,214	8,597	1,573	-98	-42	17,056	⁶ 1,392
1981	January	10,231	8,540	1,652	50	1,159	18,430	1,388
	February	10,294	8,604	1,653	-278	250	16,989	1,389
	March	10,272	8,613	1,624	-632	224	15,907	1,401
	April	10,195	8,557	1,599	-595	148	15,350	1,415
	May	10,160	8,501	1,593	-391	-374	15,353	1,438
	June	10,287	8,629	1,594	-135	406	16,095	1,430
	July	10,098	8,500	1,548	-360	91	15,682	1,439
	August	10,243	8,583	1,614	397	-999	15,263	1,457
	September	10,281	8,604	1,612	-285	-341	15,655	1,476
	October	10,225	8,563	1,598	-760	477	15,822	1,485
	November	10,269	8,586	1,630	-325	-233	15,593	1,501
	December	10,220	8,585	1,590	-170	745	16,596	1,484
		AVERAGE	10,230	8,572	1,609	-290	130	16,058
1982	January	10,257	8,669	1,548	-236	1,129	15,890	1,461
	February	10,261	8,690	1,524	-216	1,268	15,941	1,431
	March	10,212	8,597	1,570	-65	1,049	15,560	1,401
	April	10,296	8,652	1,588	107	1,594	16,048	1,350
	May	10,223	8,660	1,520	49	-34	14,845	1,349
	June	10,242	8,681	1,505	86	-515	14,931	1,362
	July	10,228	8,649	1,521	-155	-865	14,771	1,394
	August	10,301	8,701	1,543	-440	4	14,838	1,407
	September	10,306	8,733	1,513	252	-489	14,921	1,415
	October	10,283	8,676	1,540	-564	-55	14,820	1,434
	November	10,377	8,690	1,634	-357	-357	15,031	1,455
	December	10,348	8,660	1,638	143	703	15,508	⁶ 1,429
		AVERAGE	10,278	8,671	1,554	-117	280	15,253
1983	January	10,356	8,634	1,668	-567	865	14,765	1,453
	February	10,298	8,660	1,585	-382	1,128	14,772	1,432
	March*	10,259	8,677	1,544	R 56	R 1,765	R 15,484	R 1,375
	April**	NA	8,644	NA	-593	190	14,806	1,375
		AVERAGE	NA	8,654	NA	-369	990	14,963

¹ Includes lease condensate.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Ending stocks for 1973-1980 are totals as of December 31.

⁴ Includes crude oil, natural gas plant production, other hydrocarbons and alcohol.

⁵ Includes stocks located in the Strategic Petroleum Reserve.

⁶ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years.

The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-1,121, 1980-1,420 and 1982-1,462.

Stock withdrawals during 1975, 1981 and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.1.

** Italics denote preliminary data. See Explanatory Note 8.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil¹ and Petroleum Products Overview (continued)

		Imports			Exports			Net ³ Imports
		Total	Crude Oil ²	Petroleum Products	Total	Crude Oil	Petroleum Products	
1973	AVERAGE	6,256	3,244	3,012	231	2	229	6,025
1974	AVERAGE	6,112	3,477	2,635	221	3	218	5,892
1975	AVERAGE	6,056	4,105	1,951	209	6	204	5,846
1976	AVERAGE	7,313	5,287	2,026	223	8	215	7,090
1977	AVERAGE	8,807	6,615	2,193	243	50	193	8,565
1978	AVERAGE	8,363	6,356	2,008	362	158	204	8,002
1979	AVERAGE	8,456	6,519	1,937	472	235	237	7,984
1980	AVERAGE	6,909	5,263	1,646	544	287	258	6,365
1981	January	6,827	4,932	1,895	558	339	219	6,270
	February	6,772	4,873	1,899	569	198	371	6,203
	March	6,028	4,521	1,507	586	210	376	5,442
	April	5,668	4,338	1,330	570	198	372	5,098
	May	5,775	4,287	1,489	595	312	283	5,180
	June	5,435	4,061	1,375	420	123	297	5,015
	July	5,816	4,296	1,521	571	257	314	5,245
	August	5,767	4,179	1,588	644	204	440	5,123
	September	6,365	4,740	1,624	519	194	325	5,845
	October	5,959	4,380	1,579	738	226	512	5,221
	November	5,741	4,046	1,695	701	278	423	5,041
	December	5,843	4,137	1,706	656	189	467	5,187
	AVERAGE		5,996	4,396	1,599	595	228	367
1982	January	5,232	3,648	1,585	829	238	591	4,404
	February	4,691	2,949	1,742	804	304	499	3,887
	March	4,461	2,856	1,606	882	321	561	3,579
	April	4,286	2,813	1,474	786	174	611	3,501
	May	4,784	3,314	1,471	803	262	542	3,981
	June	5,227	3,782	1,445	703	94	609	4,524
	July	5,763	4,245	1,518	741	229	512	5,022
	August	5,156	3,820	1,336	858	304	554	4,298
	September	5,359	3,603	1,757	791	184	606	4,569
	October	5,230	3,636	1,594	932	270	662	4,298
	November	5,726	3,863	1,864	786	262	524	4,940
	December	4,562	2,956	1,606	860	193	667	3,702
	AVERAGE		5,041	3,461	1,581	815	236	579
1983	January	4,372	2,938	1,434	973	117	856	3,399
	February	3,691	2,268	1,423	865	262	603	2,825
	March*	R 3,629	R 2,232	R 1,398	801	174	627	2,829
	April**	4,494	2,970	1,524	NA	NA	NA	NA
AVERAGE		4,052	2,607	1,445	NA	NA	NA	NA

¹ Includes lease condensate.

² Includes crude oil for storage in the Strategic Petroleum Reserve.

³ Net Imports = Imports minus Exports.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.1.

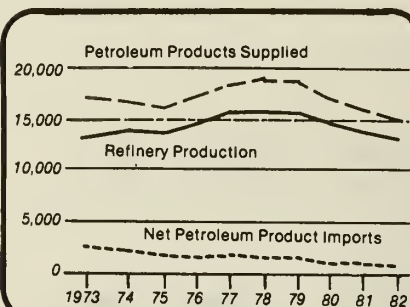
** Italics denote preliminary data. See Explanatory Note 8.

Geographic coverage: The 50 United States and the District of Columbia.

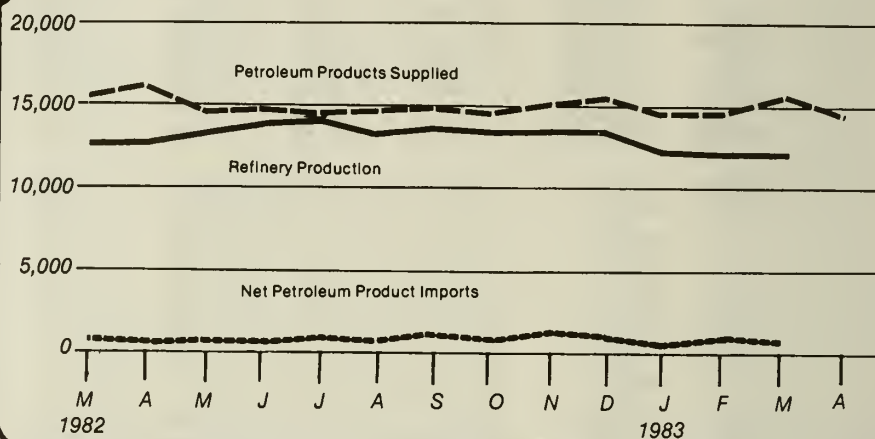
Sources: See "Sources" at the end of this section.

Petroleum Overview

(Thousand Barrels Per Day)



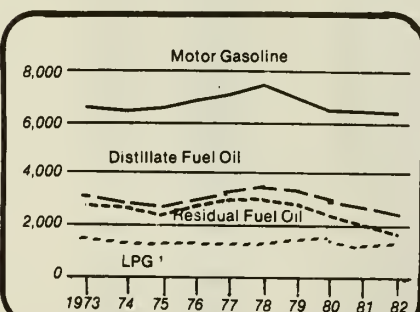
Annual



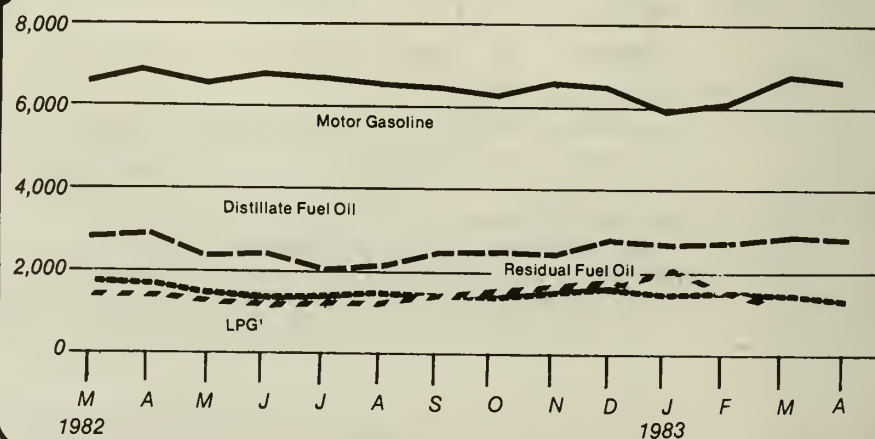
Monthly

Petroleum Products Supplied

(Thousand Barrels Per Day)



Annual

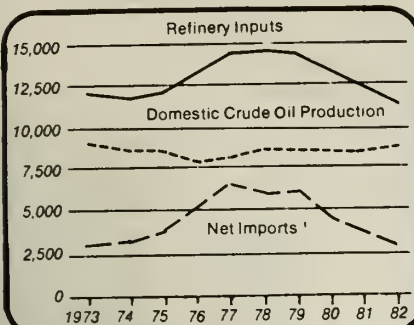


Monthly

¹ Liquefied Petroleum Gases

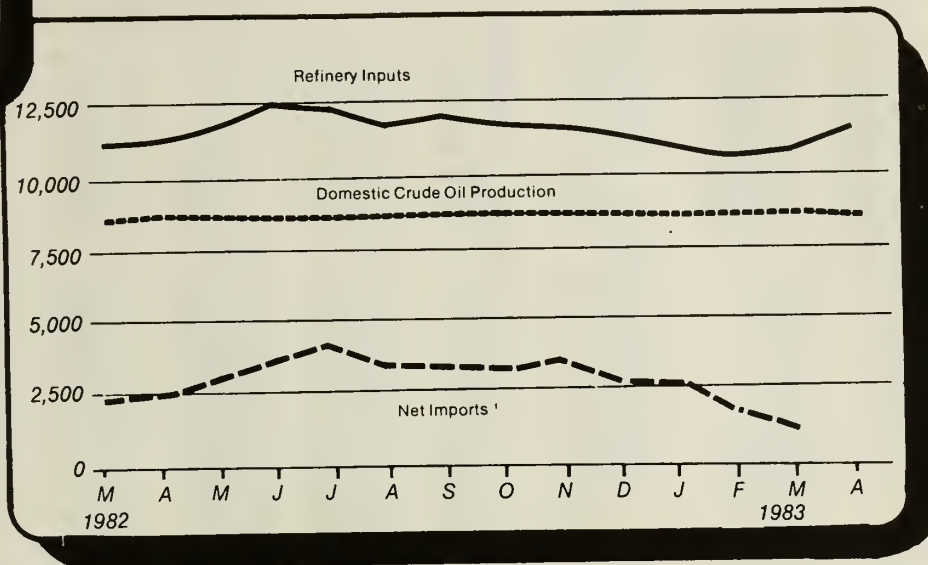
Crude Oil Supply and Disposition

(Thousand Barrels Per Day)



Annual

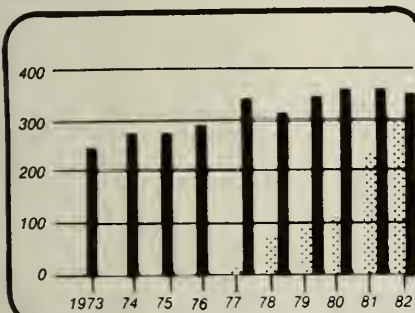
¹ Excludes SPR Imports



Monthly

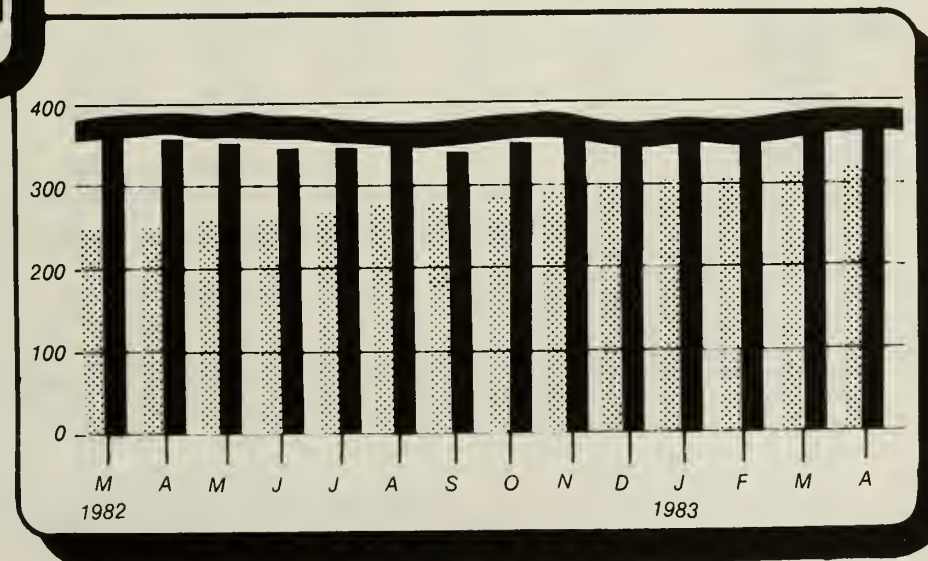
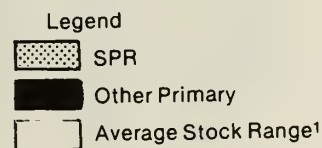
Crude Oil Ending Stocks

(Millions of Barrels)



Annual

¹ Level and width of Average Stock Ranges for crude oil is based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.



Monthly 15

Crude Oil¹ Supply and Disposition

		Supply							
		Field Production		Imports			Stock Withdrawal ²		Unac- counted for Crude Oil
		Total Domestic	Alaskan	Total	SPR ³	Other	SPR ³	Other	
Thousand Barrels per Day									
1973	AVERAGE	9,208	198	3,244		3,244		11	3
1974	AVERAGE	8,774	193	3,477		3,477		-62	-25
1975	AVERAGE	8,375	191	4,105		4,105		-17	17
1976	AVERAGE	8,132	173	5,287		5,287		-39	77
1977	AVERAGE	8,245	464	6,615	21	6,594	-20	-150	-6
1978	AVERAGE	8,707	1,229	6,356	162	6,195	-163	84	-57
1979	AVERAGE	8,552	1,401	6,519	67	6,452	-67	-81	-11
1980	AVERAGE	8,597	1,617	5,263	44	5,219	-45	-52	34
1981	January	8,540	1,606	4,932	106	4,826	-151	201	113
	February	8,604	1,619	4,873	80	4,793	-127	-150	-41
	March	8,613	1,618	4,521	140	4,382	-155	-477	154
	April	8,557	1,608	4,338	272	4,066	-444	-151	51
	May	8,501	1,580	4,287	386	3,901	-513	122	286
	June	8,629	1,632	4,061	318	3,743	-434	299	49
	July	8,500	1,605	4,296	175	4,121	-324	-36	147
	August	8,583	1,602	4,179	257	3,922	-372	769	16
	September	8,604	1,607	4,740	435	4,305	-486	201	-295
	October	8,563	1,596	4,380	453	3,927	-501	-259	166
	November	8,586	1,614	4,046	271	3,774	-259	-66	279
	December	8,585	1,623	4,137	165	3,971	-252	82	52
		AVERAGE	8,572	1,609	4,396	256	4,141	-336	46	83
1982	January	8,669	1,712	3,648	170	3,478	-159	-77	-138
	February	8,690	1,715	2,949	159	2,790	-213	-3	199
	March	8,597	1,702	2,856	185	2,671	-235	170	278
	April	8,652	1,687	2,813	190	2,623	-233	341	56
	May	8,660	1,725	3,314	204	3,110	-176	225	105
	June	8,681	1,675	3,782	105	3,678	-105	191	110
	July	8,649	1,715	4,245	97	4,147	-97	-58	1
	August	8,701	1,699	3,820	208	3,611	-208	-233	140
	September	8,733	1,707	3,603	139	3,463	-143	395	-218
	October	8,676	1,677	3,636	216	3,420	-216	-348	324
	November	8,690	1,667	3,863	180	3,683	-179	-177	-141
	December	8,660	1,663	2,956	124	2,832	-125	267	2
		AVERAGE	8,671	1,695	3,461	165	3,296	-174	57	60
1983	January	8,634	1,698	2,938	219	2,720	-219	-348	238
	February	8,660	1,725	2,268	197	2,071	-197	-185	423
	March*	8,677	1,726	R 2,232	R 201	R 2,031	R -184	R 240	134
	April**	8,644	1,710	2,970	204	2,766	-204	-389	NA
	AVERAGE	8,654	1,715	2,607	205	2,402	-201	-168	NA

¹ Includes lease condensate.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Strategic Petroleum Reserve.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.2.

** Italics denote preliminary data. See Explanatory Note 8.

Note: Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil¹ Supply and Disposition (continued)

		Supply	Disposition				Ending Stocks ²		
		Crude Used Directly ³	Crude Losses	Refinery Inputs	Exports	Product Supplied ³	Total Crude Oil	SPR ⁴	Other Primary
		Thousand Barrels per Day					Millions of Barrels		
1973	AVERAGE	-19	13	12,431	2	NA	242		242
1974	AVERAGE	-15	13	12,133	3	NA	⁵ 265		⁵ 265
1975	AVERAGE	-17	13	12,442	6	NA	271		271
1976	AVERAGE	-18	15	13,416	8	NA	285		285
1977	AVERAGE	-14	16	14,602	50	NA	348	7	340
1978	AVERAGE	-14	16	14,739	158	NA	376	67	309
1979	AVERAGE	-13	16	14,648	235	NA	430	91	339
1980	AVERAGE	-13	15	13,481	287	NA	⁵ 466	108	⁵ 358
1981	January	-43	6	13,247	339	NA	486	112	374
	February	-55	3	12,902	198	NA	494	116	378
	March	-57	6	12,383	210	NA	514	121	393
	April	-59	3	12,091	198	NA	532	134	397
	May	-59	3	12,309	312	NA	544	150	394
	June	-58	7	12,415	123	NA	548	163	385
	July	-58	7	12,261	257	NA	559	173	386
	August	-58	5	12,908	204	NA	547	185	362
	September	-61	4	12,505	194	NA	555	199	356
	October	-63	3	12,057	226	NA	579	215	364
	November	-64	4	12,240	278	NA	589	223	366
	December	-63	4	12,349	189	NA	594	230	363
	AVERAGE	-58	5	12,470	228	NA			
1982	January	-63	3	11,638	238	NA	606	235	371
	February	-64	2	11,252	304	NA	612	241	371
	March	-63	5	11,277	321	NA	614	249	366
	April	-65	3	11,386	174	NA	611	256	355
	May	-62	3	11,801	262	NA	609	261	348
	June	-60	7	12,498	94	NA	607	264	343
	July	-60	3	12,447	229	NA	612	267	345
	August	-57	2	11,858	304	NA	625	274	352
	September	-56	3	12,126	184	NA	618	278	340
	October	-51	2	11,750	270	NA	635	285	351
	November	-51	1	11,741	262	NA	646	290	356
	December	-53	1	11,514	193	NA	⁵ 642	294	⁵ 348
	AVERAGE	-58	4	11,776	236	NA			
1983	January	NA	2	11,070	117	54	661	301	361
	February	NA	3	10,635	262	69	672	306	366
	March*	NA	2	R 10,854	174	70	R 670	312	R 359
	April**	NA	NA	11,568	NA	NA	683	318	365
	AVERAGE	NA	NA	11,037	NA	NA			

¹ Includes lease condensate.

² Ending stocks for 1973-1980 are totals as of December 31.

³ Beginning in January 1983, crude oil used directly as fuel is presented as product supplied for crude oil. Prior to January 1983 crude oil used directly was included with crude oil losses in this table and with product supplied for distillate and residual fuel oils.

⁴ Strategic Petroleum Reserve.

⁵ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years.

The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis) end of year stocks would be: 1974-265, 1980-483 (Total) and 375 (Other Primary), and 1982-644 (Total) and 350 (Other Primary).

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.2.

** Italics denote preliminary data. See Explanatory Note 8.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Finished Motor Gasoline Supply and Disposition

		Supply			Disposition				Ending Stocks ¹	
		Total Produc- tion	Imports ²	Stock With- drawal ² ³	Exports	Product Supplied			Total Motor Gasoline ⁴	Finished Motor Gasoline
						Total	Unleaded ⁵	Unleaded		
Thousand Barrels per Day								Percent of Total	Millions of Barrels	
1973	AVERAGE	6,535	134	9	4	6,674	NA	NA	209	
1974	AVERAGE	6,360	204	-24	2	6,537	NA	NA	⁶ 218	
1975	AVERAGE	6,520	184	-28	2	6,675	NA	NA	235	
1976	AVERAGE	6,841	131	10	3	6,978	NA	NA	231	
1977	AVERAGE	7,033	217	-72	2	7,177	1,976	27.5	258	
1978	AVERAGE	7,169	190	54	1	7,412	2,521	34.0	238	
1979	AVERAGE	6,852	181	2	(^s)	7,034	2,798	39.8	237	
1980	AVERAGE	6,506	140	-66	1	6,579	3,067	46.6	⁶ 261	
1981	January	6,715	138	-421	(^s)	6,431	3,141	48.8	276	227
	February	6,308	111	-118	1	6,301	3,095	49.1	284	230
	March	6,213	171	-81	(^s)	6,303	3,097	49.1	285	232
	April	6,114	186	303	(^s)	6,602	3,284	49.7	272	223
	May	6,122	150	344	1	6,615	3,115	47.1	259	213
	June	6,220	186	622	1	7,028	3,419	48.6	242	194
	July	6,405	151	268	(^s)	6,823	3,424	50.2	228	186
	August	6,611	124	-95	3	6,637	3,344	50.4	233	189
	September	6,564	169	-70	2	6,662	3,338	50.1	237	191
	October	6,426	147	7	3	6,578	3,257	49.5	236	190
	November	6,564	148	-338	1	6,373	3,198	50.2	248	201
	December	6,586	197	-91	11	6,681	3,444	51.5	253	203
		AVERAGE	6,405	157	28	2	6,588	3,264	49.5	
1982	January	6,181	114	-358	18	5,920	3,033	51.2	262	214
	February	5,917	133	28	8	6,070	3,145	51.8	262	213
	March	6,004	183	469	44	6,612	3,396	51.4	248	199
	April	6,104	177	641	33	6,890	3,494	50.7	223	180
	May	6,322	163	188	23	6,650	3,415	51.3	215	174
	June	6,767	195	-136	14	6,812	3,561	52.3	220	178
	July	6,788	200	-165	24	6,799	3,574	52.6	226	183
	August	6,447	284	-60	16	6,655	3,520	52.9	226	185
	September	6,530	215	-217	22	6,507	3,385	52.0	234	191
	October	6,253	177	-25	15	6,391	3,360	52.6	234	192
	November	6,273	206	91	11	6,559	3,448	52.6	230	189
	December	6,540	178	-164	7	6,548	3,486	53.2	⁶ 235	⁶ 194
		AVERAGE	6,347	186	24	20	6,537	3,403	52.1	
1983	January	6,020	148	-186	(^s)	5,981	3,352	56.0	251	208
	February	5,848	142	32	(^s)	6,022	3,257	54.1	251	207
	March*	R 5,897	R 205	R 765	23	R 6,843	3,620	52.9	R 224	R 184
	April**	6,192	216	127	NA	6,536	NA	NA	222	185
		AVERAGE	5,991	178	189	NA	6,352	NA	NA	

¹ Ending stocks for 1973-1980 are totals as of December 31.

² Beginning in 1981, excludes blending components.

³ A negative number indicates an increase in stocks and a positive number indicates a decrease.

⁴ Includes motor gasoline blending components.

⁵ Includes gasohol.

⁶ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-225, 1980-263, 1982-244 (Total) and 203 (Finished). Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

(^s) = Less than 500 barrels per day. NA = Not available. R = Revised data.

* See Explanatory Note 9.3.

** Italics denote preliminary data. See Explanatory Note 8.

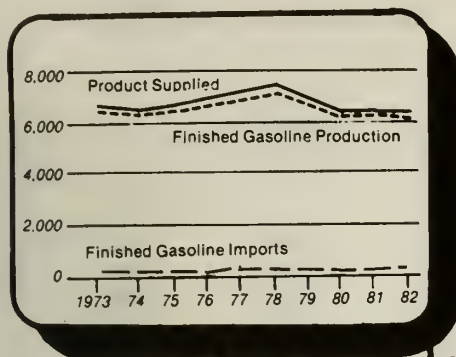
Note: Beginning in January 1981, survey forms were modified.

Geographic coverage: The 50 United States and the District of Columbia.

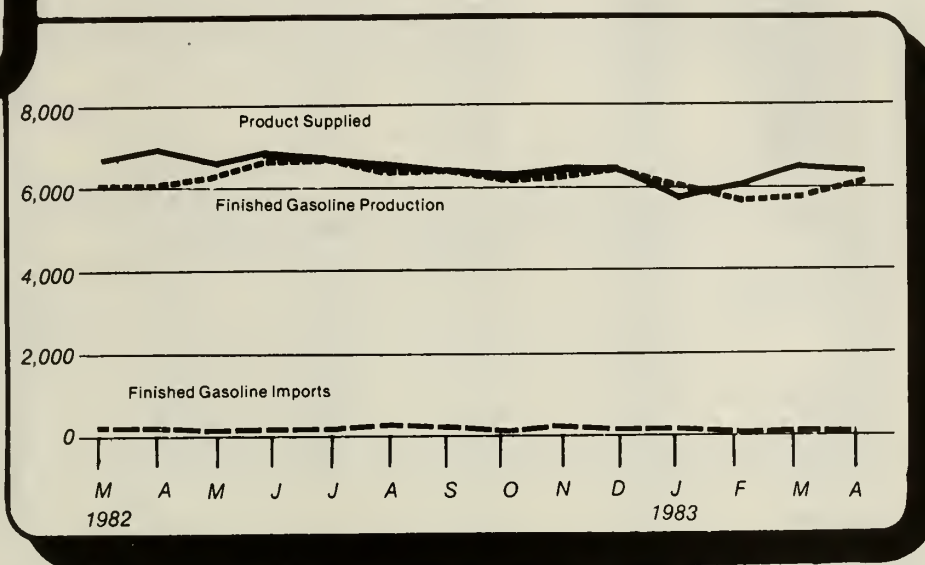
Sources: See "Sources" at the end of this section.

Motor Gasoline Supply and Disposition

(Thousand Barrels Per Day)



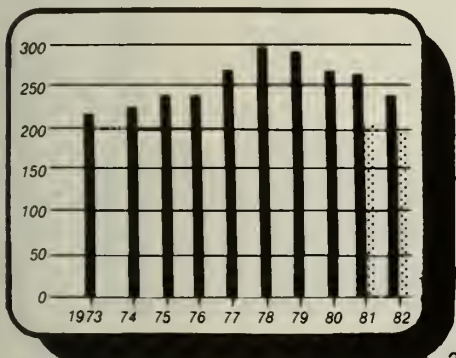
Annual



Monthly

Motor Gasoline Ending Stocks

(Millions of Barrels)



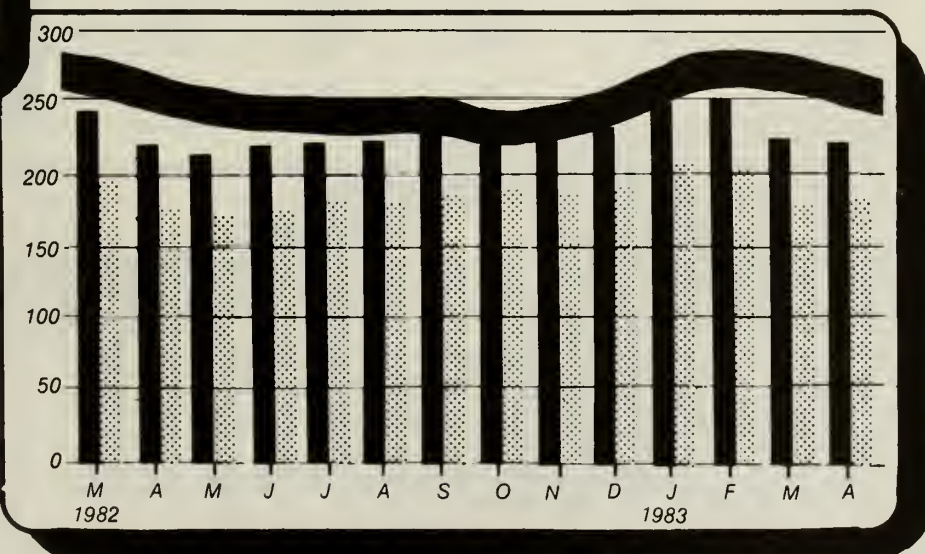
Annual

¹ Includes finished motor gasoline blending components

² Level and width of Average Stock Range for total motor gasoline based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.

Legend

- Total Motor Gasoline¹
- Finished Motor Gasoline
- Average Stock Range²



Monthly 19

Distillate Fuel Oil Supply and Disposition

	Supply				Disposition		Ending Stocks ¹
	Total Production	Imports	Stock Withdrawal ²	Crude Used Directly ³	Exports	Product Supplied ³	
	Thousand Barrels per Day						Millions of Barrels
1973 AVERAGE	2,822	392	-115	2	9	3,092	196
1974 AVERAGE	2,669	289	-9	2	2	2,948	⁴ 200
1975 AVERAGE	2,654	155	40	2	1	2,851	209
1976 AVERAGE	2,924	146	62	1	1	3,133	186
1977 AVERAGE	3,278	250	-176	1	1	3,352	250
1978 AVERAGE	3,167	173	93	1	3	3,432	216
1979 AVERAGE	3,153	193	-34	1	3	3,311	229
1980 AVERAGE	2,662	142	64	1	3	2,866	⁴ 205
1981 January	2,989	273	836	11	(s)	4,109	179
February	2,809	325	246	11	17	3,373	173
March	2,484	147	264	9	(s)	2,904	164
April	2,418	116	-9	10	3	2,532	165
May	2,454	179	-232	10	(s)	2,411	172
June	2,501	225	-270	9	(s)	2,464	180
July	2,395	179	-204	10	2	2,378	186
August	2,656	174	-450	8	(s)	2,388	200
September	2,610	129	-235	10	1	2,513	207
October	2,485	119	197	9	5	2,803	201
November	2,716	124	36	11	6	2,880	200
December	2,856	95	277	11	26	3,212	192
AVERAGE	2,613	173	38	10	5	2,829	
1982 January	2,615	96	780	10	90	3,410	166
February	2,447	130	689	11	90	3,187	147
March	2,294	48	612	10	84	2,881	128
April	2,357	59	631	13	64	2,996	109
May	2,618	74	-184	10	75	2,444	114
June	2,731	100	-335	10	55	2,450	125
July	2,734	124	-761	11	24	2,084	148
August	2,526	79	-346	10	40	2,228	159
September	2,658	59	-77	12	139	2,514	161
October	2,837	97	-290	8	66	2,586	170
November	2,863	141	-514	8	24	2,475	186
December	2,655	109	226	10	143	2,856	⁴ 179
AVERAGE	2,612	93	32	10	74	2,672	
1983 January	2,314	58	561	NA	173	2,760	168
February	2,136	58	742	NA	105	2,832	147
March*	R 1,991	R 42	R 926	NA	59	R 2,900	R 119
April**	2,218	68	575	NA	NA	2,708	103
AVERAGE	2,165	56	701	NA	NA	2,800	

¹ Ending Stocks for 1973-1980 are totals as of December 31.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Beginning in January 1983, product supplied for distillate fuel oil does not include crude oil used directly. See Explanatory Note 4.

⁴ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-224, 1980-205, and 1982-186. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

(s) = Less than 500 barrels per day. NA = Not available. R = Revised data.

Totals may not equal sum of components due to independent rounding.

* See Explanatory Note 9.4.

** Italics denote preliminary data. See Explanatory Note 8.

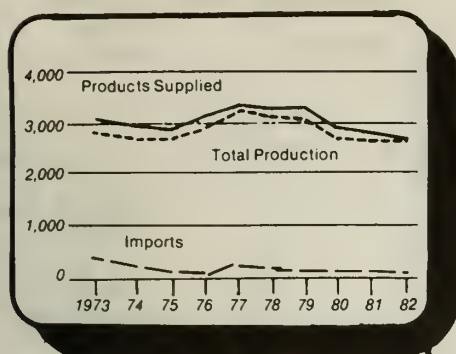
Note: Beginning in January 1981, survey forms were modified.

Geographic Coverage: The 50 United States and the District of Columbia.

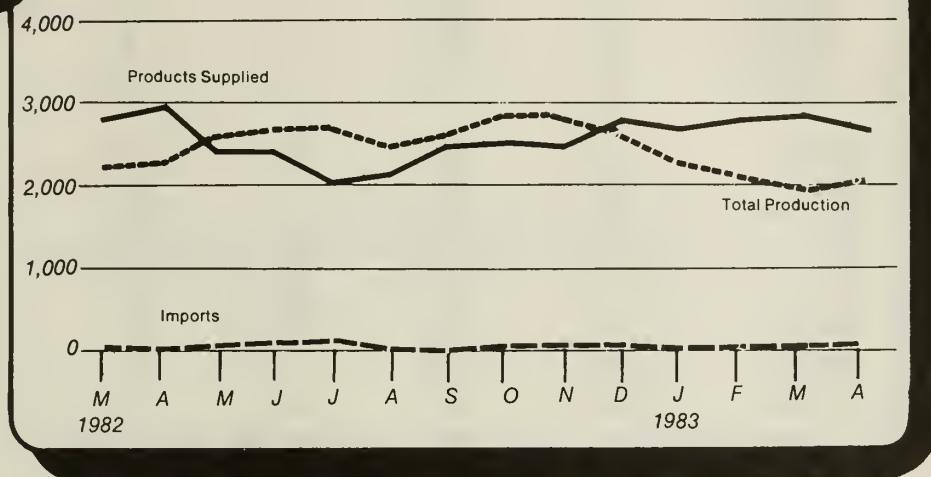
Sources: See "Sources" at the end of this section.

Distillate Fuel Oil Supply and Disposition

(Thousand Barrels Per Day)



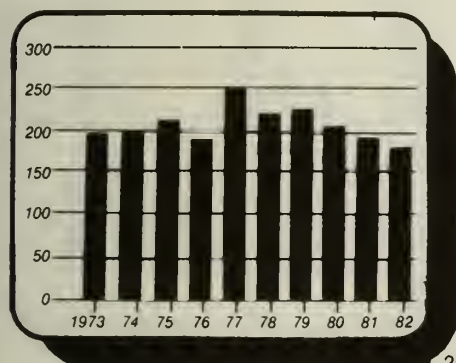
Annual



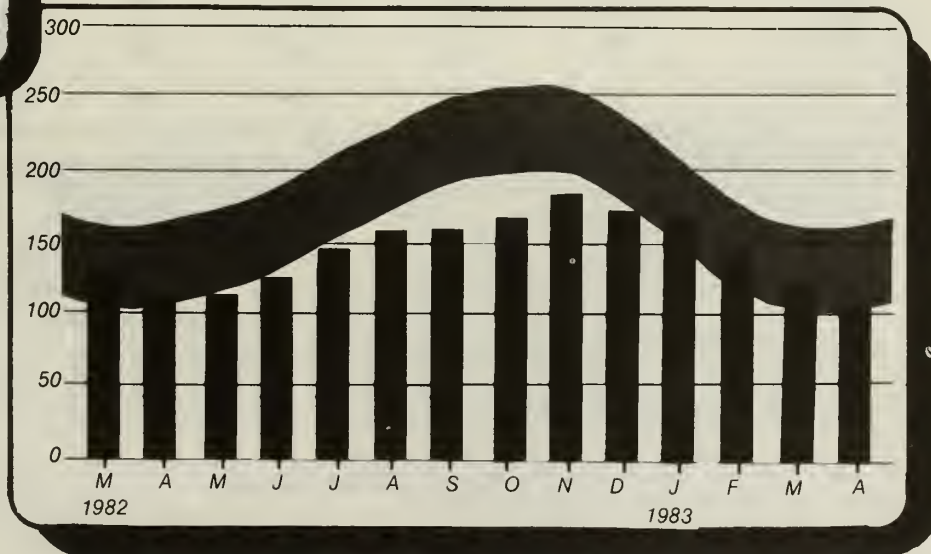
Monthly

Distillate Fuel Oil Ending Stocks

(Millions of Barrels)



Annual



Monthly 21

¹ Level and width of Average Stock Range for distillate fuel oil is based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.

Residual Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Crude Used Directly ³	Exports	Product Supplied ³	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	971	1,853	5	17	23	2,822	53
1974	AVERAGE	1,070	1,587	-17	13	14	2,639	⁴ 60
1975	AVERAGE	1,235	1,223	2	15	15	2,462	74
1976	AVERAGE	1,377	1,413	5	17	12	2,801	72
1977	AVERAGE	1,754	1,359	-48	13	6	3,071	90
1978	AVERAGE	1,667	1,355	-1	13	13	3,023	90
1979	AVERAGE	1,687	1,151	-15	12	9	2,826	96
1980	AVERAGE	1,580	939	10	12	33	2,508	⁴ 92
1981	January	1,612	1,015	302	32	65	2,896	82
	February	1,565	954	150	44	125	2,588	78
	March	1,424	699	100	48	145	2,126	75
	April	1,320	584	66	49	151	1,868	73
	May	1,223	741	-170	49	25	1,817	78
	June	1,232	540	291	49	76	2,037	69
	July	1,174	830	2	48	82	1,971	69
	August	1,231	819	-179	50	69	1,852	75
	September	1,292	841	-176	51	126	1,882	80
	October	1,238	786	8	54	202	1,884	80
	November	1,227	880	-49	53	203	1,909	81
	December	1,329	916	110	52	157	2,250	78
	AVERAGE	1,321	800	37	48	118	2,088	
1982	January	1,183	821	328	53	235	2,150	68
	February	1,136	928	358	53	213	2,261	58
	March	1,121	910	26	53	197	1,912	57
	April	1,162	762	124	52	234	1,867	54
	May	1,127	738	-175	52	191	1,551	59
	June	1,077	643	-49	50	217	1,504	61
	July	1,029	576	51	49	239	1,466	59
	August	1,007	519	200	47	235	1,538	53
	September	1,007	871	-302	44	148	1,472	62
	October	954	758	-56	43	234	1,466	64
	November	989	843	-95	43	182	1,597	66
	December	990	747	8	43	186	1,602	⁴ 66
	AVERAGE	1,065	758	33	48	209	1,695	
1983	January	935	691	243	NA	294	1,574	61
	February	857	632	270	NA	191	1,568	53
	March*	R 833	R 686	R 220	NA	169	R 1,569	R 46
	April**	1,004	714	26	NA	NA	1,481	43
	AVERAGE	908	682	189	NA	NA	1,548	

¹ Ending Stocks for 1973-1980 are totals as of December 31.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Beginning in January 1983, product supplied for residual fuel oil does not include crude oil used directly. See Explanatory Note 4.

⁴ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-75, 1980-91, and 1982-68. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.4.

** Italics denote preliminary data. See Explanatory Note 8.

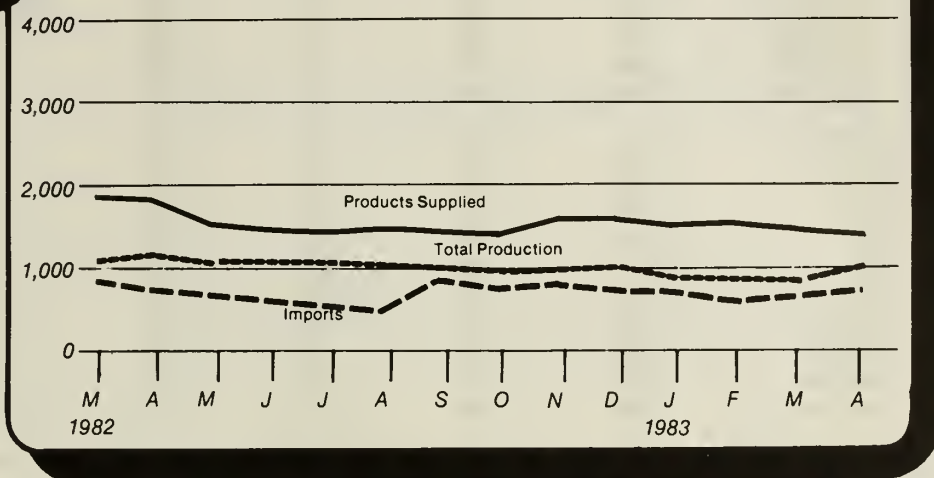
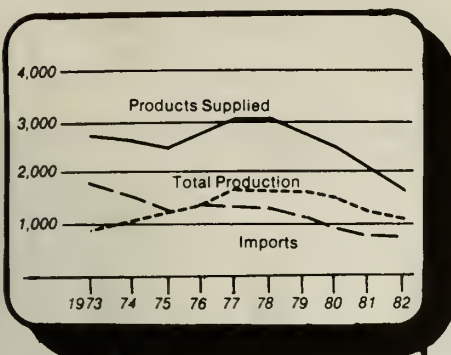
Note: Beginning in January 1981, survey forms were modified.

Geographic Coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

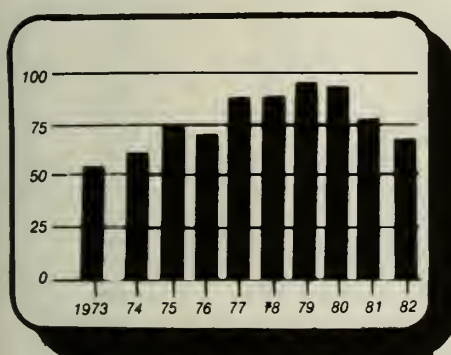
Residual Fuel Oil Supply and Disposition

(Thousand Barrels Per Day)

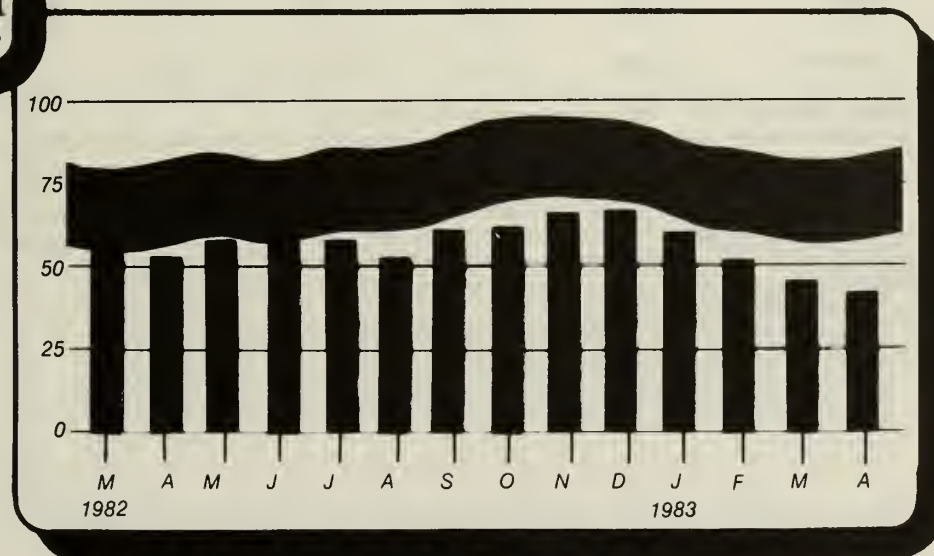


Residual Fuel Oil Ending Stocks

(Millions of Barrels)



Legend
Average Stock Range ¹



¹ Level and width of Average Stock Range for residual fuel oil based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.

Monthly 23

Liquefied Petroleum Gases Supply and Disposition

		Supply			Disposition			Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Refinery Inputs	Exports	Product Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	1,600	132	-35	220	27	1,449	99
1974	AVERAGE	1,565	123	-38	220	25	1,406	³ 113
1975	AVERAGE	1,527	112	-35	246	26	1,333	125
1976	AVERAGE	1,535	130	24	260	25	1,404	116
1977	AVERAGE	1,566	161	-55	233	18	1,422	136
1978	AVERAGE	1,537	123	12	239	20	1,413	132
1979	AVERAGE	1,556	217	70	236	15	1,592	111
1980	AVERAGE	1,535	216	-27	233	21	1,469	³ 120
1981	January	1,617	306	363	352	21	1,913	117
	February	1,593	327	173	303	21	1,769	112
	March	1,551	260	-4	257	20	1,530	112
	April	1,586	214	-236	231	26	1,308	119
	May	1,587	189	-258	220	19	1,279	127
	June	1,567	206	-208	237	24	1,304	133
	July	1,507	213	-258	215	17	1,229	141
	August	1,592	195	-242	235	149	1,160	149
	September	1,622	199	-75	287	21	1,438	151
	October	1,593	287	72	320	76	1,556	149
	November	1,571	280	86	383	58	1,495	146
	December	1,468	255	379	428	50	1,624	135
	AVERAGE	1,571	244	-18	289	42	1,466	
1982	January	1,546	314	480	398	67	1,873	122
	February	1,476	291	310	327	51	1,699	114
	March	1,523	223	145	289	74	1,528	109
	April	1,566	188	107	257	77	1,527	106
	May	1,583	186	-61	235	43	1,431	108
	June	1,571	192	-109	262	106	1,286	111
	July	1,556	227	-5	253	37	1,487	111
	August	1,591	125	-44	254	61	1,357	112
	September	1,606	247	33	273	85	1,528	111
	October	1,582	194	92	306	81	1,481	109
	November	1,603	267	172	370	37	1,634	103
	December	1,626	258	270	395	56	1,702	³ 95
	AVERAGE	1,570	225	115	301	65	1,544	
1983	January	1,662	240	618	313	118	2,088	84
	February	1,560	305	84	237	76	1,636	81
	March*	1,517	166	-51	189	127	1,316	83
	AVERAGE	1,580	235	221	247	108	1,681	

¹ Ending stocks for 1973 - 1980 are totals as of December 31.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-113, 1980-128, and 1982-103. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

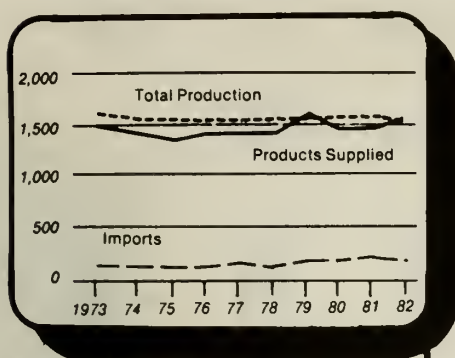
* See Explanatory Note 9.5.

Geographic coverage: The 50 United States and the District of Columbia.

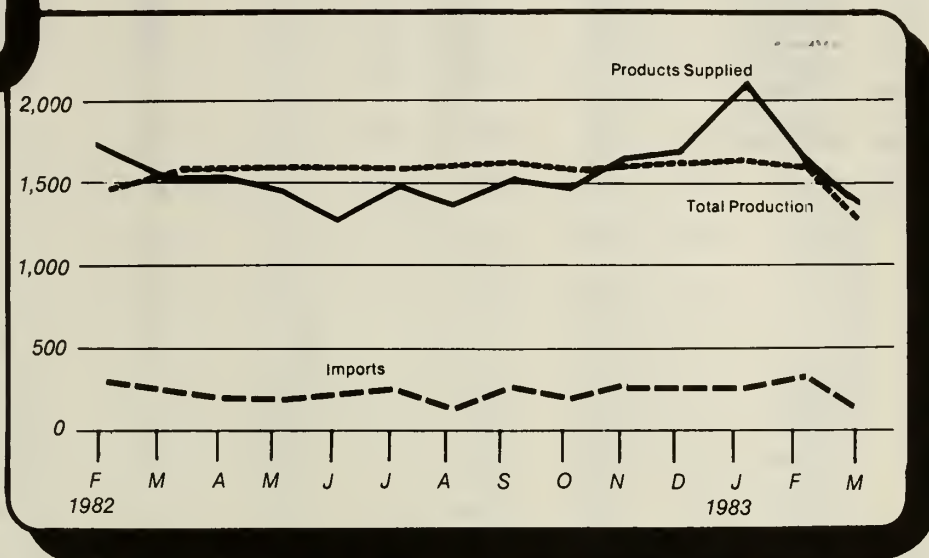
Sources: See "Sources" at the end of this section.

Liquefied Petroleum Gases Supply and Disposition

(Thousand Barrels Per Day)



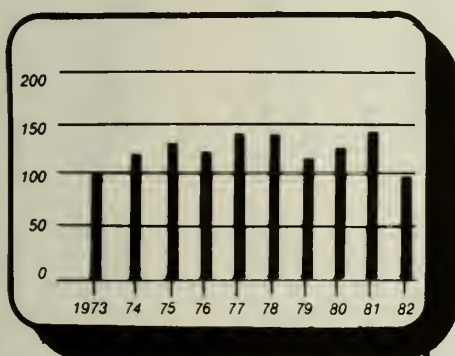
Annual



Monthly

Liquefied Petroleum Gases Ending Stocks

(Millions of Barrels)



Annual

Legend
Average Stock Range¹



Monthly 25

¹ Level and width of Average Stock range for liquefied petroleum gases based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.

Other Petroleum Products¹ Supply and Disposition

		Supply			Disposition			Ending Stocks ²
		Total Production	Imports	Stock Withdrawal ³	Refinery Inputs	Exports	Products Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	3,693	502	-9	750	166	3,270	208
1974	AVERAGE	3,558	432	-28	665	174	3,123	⁴ 218
1975	AVERAGE	3,424	277	-2	537	160	3,002	219
1976	AVERAGE	3,643	206	-5	524	175	3,145	220
1977	AVERAGE	3,912	205	-27	514	165	3,410	230
1978	AVERAGE	4,046	166	14	492	167	3,568	225
1979	AVERAGE	4,153	195	-37	352	209	3,749	238
1980	AVERAGE	3,956	210	-23	311	198	3,634	⁴ 247
1981	January	3,821	162	80	851	132	3,081	296
	February	3,723	182	-200	538	208	2,958	302
	March	3,722	230	-55	642	210	3,043	304
	April	3,711	230	24	733	192	3,040	303
	May	3,892	229	-58	594	238	3,231	305
	June	3,925	218	-29	656	197	3,261	306
	July	3,852	149	284	791	212	3,282	297
	August	3,876	276	-33	676	219	3,225	298
	September	3,718	285	215	883	176	3,159	291
	October	3,503	241	193	710	227	3,000	285
	November	3,579	262	33	784	154	2,935	284
	December	3,543	243	71	805	223	2,829	282
	AVERAGE	3,739	226	46	723	199	3,088	
1982	January	3,181	240	-102	602	180	2,536	284
	February	3,364	260	-116	646	138	2,724	287
	March	3,485	241	-204	734	161	2,627	294
	April	3,394	287	91	801	204	2,767	291
	May	3,296	309	198	823	210	2,769	285
	June	3,481	315	115	815	216	2,879	281
	July	3,578	391	15	862	187	2,935	281
	August	3,519	329	256	841	202	3,060	273
	September	3,442	365	74	767	213	2,901	271
	October	3,472	367	223	901	266	2,896	264
	November	3,464	406	-12	824	269	2,766	264
	December	3,285	314	363	886	275	2,801	⁴ 253
	AVERAGE	3,413	319	77	793	211	2,805	
1983	January	3,222	297	-371	570	271	2,307	271
	February	3,270	287	-1	680	232	2,645	271
	March*	3,400	298	-94	570	249	2,786	273
	AVERAGE	3,298	294	-160	604	251	2,577	

¹ Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.

² Ending Stocks for 1973-1980 are totals as of December 31.

³ A negative number indicates an increase in stocks and a positive number indicates a decrease.

⁴ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-220, 1980-249, and 1982-259. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

* See Explanatory Note 9.6.

Geographic Coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil and Petroleum Product Imports from OPEC Sources¹

	Algeria	Libya	Saudi Arabia	United Arab Emirates	Indonesia	Iran	Nigeria	Venezuela	Other OPEC ²	Total OPEC	Total Arab OPEC ³
Thousand Barrels per Day											
1973											
AVERAGE	136	164	486	71	213	223	459	1,135	106	2,993	915
1974											
AVERAGE	190	4	461	74	300	469	713	979	88	3,280	752
1975											
AVERAGE	282	232	715	117	390	280	762	702	122	3,601	1,383
1976											
AVERAGE	432	453	1,230	254	539	298	1,025	700	134	5,066	2,424
1977											
AVERAGE	559	723	1,380	335	541	535	1,143	690	287	6,193	3,185
1978											
AVERAGE	649	654	1,144	385	573	555	919	645	226	5,751	2,963
1979											
AVERAGE	636	658	1,356	281	420	304	1,080	690	212	5,637	3,056
1980											
AVERAGE	488	554	1,261	172	348	9	857	481	130	4,300	2,551
1981											
January	341	500	1,284	93	424	0	908	549	27	4,127	2,219
February	381	468	1,122	93	406	0	866	463	92	3,891	2,064
March	352	485	1,027	47	328	0	771	360	54	3,425	1,912
April	263	485	1,034	68	307	0	812	237	39	3,245	1,867
May	393	443	933	17	297	0	664	331	124	3,203	1,796
June	356	380	865	60	367	0	528	248	118	2,922	1,703
July	333	251	1,073	80	340	0	651	466	38	3,233	1,757
August	348	274	1,082	61	377	0	321	523	84	3,070	1,765
September	336	154	1,477	96	371	0	323	359	149	3,264	2,063
October	242	147	1,342	90	427	0	412	389	172	3,220	1,820
November	210	132	1,270	112	353	0	517	535	56	3,184	1,724
December	176	122	1,045	158	400	0	684	411	132	3,129	1,502
AVERAGE	311	319	1,129	81	366	0	620	406	90	3,323	1,848
1982											
January	254	161	877	87	273	0	662	376	128	2,818	1,378
February	139	92	692	79	236	0	579	347	102	2,267	1,044
March	91	37	555	155	200	0	503	399	91	2,032	860
April	85	0	479	122	215	0	427	411	79	1,818	707
May	179	0	601	116	236	0	211	414	54	1,811	897
June	93	0	593	94	215	72	537	361	110	2,075	799
July	122	0	644	123	327	69	910	349	95	2,640	927
August	170	0	489	133	272	27	542	288	134	2,057	807
September	162	0	432	57	191	21	479	514	52	1,907	659
October	249	7	494	61	227	108	291	496	96	2,029	810
November	247	13	489	47	283	34	480	539	115	2,246	795
December	141	0	237	12	265	88	447	399	73	1,661	407
AVERAGE	161	26	548	91	245	35	505	408	94	2,113	840
1983											
January	204	0	282	47	255	43	186	324	43	1,384	533
February	104	0	214	9	217	0	92	371	28	1,035	326
March	63	0	103	0	138	0	121	425	173	1,023	183
AVERAGE	124	0	199	19	203	15	134	373	83	1,151	348

¹ Excludes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil processed in OPEC countries.

² Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar.

³ Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait, and Qatar.

Totals may not equal sum of components due to independent rounding.

Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil and Petroleum Product Imports from Non-OPEC Sources¹

	Bahamas	Canada	Mexico	Netherlands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico ²	Virgin Islands ²	Other	Total
Thousand Barrels per Day										
1973										
AVERAGE	174	1,325	16	585	255	15	99	329	465	3,263
1974										
AVERAGE	164	1,070	8	511	251	8	90	391	340	2,832
1975										
AVERAGE	152	846	71	332	242	14	90	406	300	2,454
1976										
AVERAGE	118	599	87	275	274	31	88	422	353	2,247
1977										
AVERAGE	171	517	179	211	289	126	105	466	550	2,614
1978										
AVERAGE	160	467	318	229	253	180	94	429	484	2,613
1979										
AVERAGE	147	538	439	231	190	202	92	431	548	2,819
1980										
AVERAGE	78	455	533	225	176	176	88	388	491	2,609
1981										
January	39	543	401	198	150	233	89	494	552	2,701
February	84	546	437	227	163	271	46	481	626	2,881
March	74	472	488	227	93	263	45	370	571	2,603
April	68	412	418	198	139	402	40	365	380	2,423
May	122	365	522	213	105	368	58	344	474	2,573
June	51	353	538	196	124	397	67	262	525	2,513
July	77	382	384	212	178	553	50	206	541	2,583
August	69	378	489	255	123	592	68	184	539	2,698
September	111	423	708	163	169	528	72	265	661	3,100
October	63	449	669	161	121	351	60	303	562	2,739
November	63	547	628	168	108	253	76	294	421	2,557
December	70	501	587	148	125	280	73	367	563	2,714
AVERAGE	74	447	522	197	133	375	62	327	534	2,672
1982										
January	28	509	426	179	106	346	62	334	425	2,415
February	50	533	489	221	120	132	38	354	487	2,424
March	43	435	503	189	118	293	62	307	479	2,429
April	67	357	467	180	166	247	36	266	682	2,468
May	76	416	767	152	95	516	47	302	603	2,974
June	32	462	797	141	129	539	58	322	673	3,153
July	30	527	783	158	111	433	38	369	674	3,122
August	68	435	854	145	106	520	24	320	627	3,099
September	92	484	897	195	89	631	51	270	744	3,453
October	45	456	682	148	109	666	52	262	783	3,202
November	48	547	860	203	90	623	81	334	694	3,480
December	89	561	675	174	102	438	48	336	480	2,901
AVERAGE	56	477	684	173	112	451	50	315	613	2,928
1983										
January	68	536	849	218	73	315	40	299	588	2,988
February	92	592	722	179	81	193	50	192	554	2,655
March	86	488	760	187	78	240	43	162	563	2,606
AVERAGE	82	537	779	195	77	251	44	219	569	2,753

¹ Includes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries.

² U.S. Possessions.

Totals may not equal sum of components due to independent rounding.

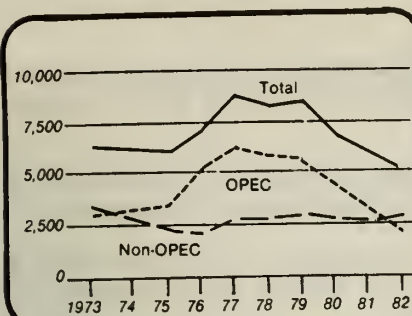
Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.

Geographic coverage: The 50 United States and the District of Columbia.

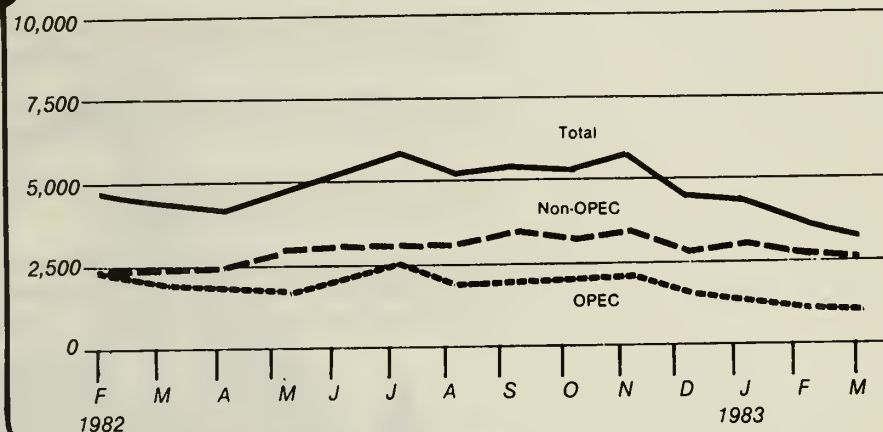
Sources: See "Sources" at the end of this section.

Crude Oil (including SPR) and Petroleum Products Imports

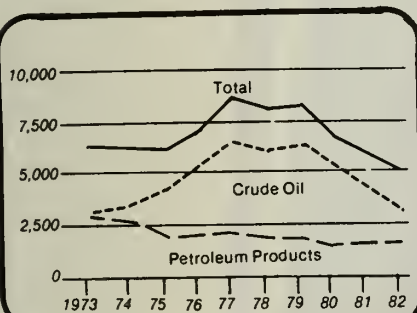
(Thousand Barrels Per Day)



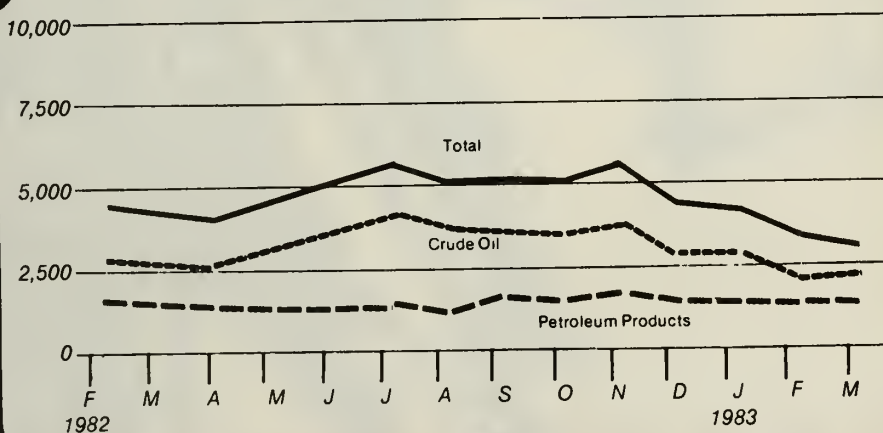
Annual



Monthly



Annual



Monthly

Sources

1. 1973 through 1976: Bureau of Mines, U.S. Department of the Interior, *Petroleum Statement, Annual and PAD Districts Supply/Demand, Annual*, Mineral Industry Surveys.
2. 1977 through 1980: Energy Information Administration, U.S. Department of Energy, *Monthly Petroleum Statistics Report*, (unleaded gasoline category).
3. 1977 through 1980: Energy Information Administration, U.S. Department of Energy, *Petroleum Statement, Annual and PAD Districts Supply/Demand, Annual*, Energy Data Reports.
4. January 1981 through December 1981: Energy Information Administration, U.S. Department of Energy, *Petroleum Supply Annual*.
5. January 1982 through March 1983: Detailed statistics in appropriate issues of the *Petroleum Supply Monthly*. (See Explanatory Notes 9.1 through 9.6).
6. April 1983: Estimates based on EIA weekly data (except domestic crude oil production) (See Explanatory Note 1.1).
7. January 1982 through April 1983: Domestic crude oil production estimate based on historical statistics from State Conservation Agencies and the U.S. Geological Survey. (See Explanatory Note 3).

Detailed Statistics



1870
1871



Table 1. U.S. Petroleum Balance, March 1983

	Current Month		Year-to-date	
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
Crude Oil (Including Lease Condensate)				
Field Production				
(1) Alaska	E 53,513	1,726	E 154,457	1,716
(2) Lower 48 States	E 215,476	6,951	E 624,673	6,941
(3) Total U.S.	E 268,989	8,677	E 779,130	8,657
Net Imports				
(4) Imports (Gross Excluding SPR)	62,967	2,031	205,246	2,281
(5) SPR Imports	6,222	201	18,514	206
(6) Exports	5,379	174	16,341	182
(7) Imports (Net Including SPR)	63,810	2,058	207,419	2,305
Other Sources				
(8) SPR Withdrawal (+) or Addition (-)	-5,697	-184	-18,003	-200
(9) Other Stock Withdrawal (+) or Addition (-)	7,430	240	-8,546	-95
(10) Product Supplied and Losses	-2,210	-71	-5,954	-66
(11) Unaccounted for ¹	4,161	134	23,367	260
(12) Total Other Sources	3,684	119	-9,136	-102
(13) Crude Input to Refineries	336,483	10,854	977,413	10,860
(13) = (3) + (7) + (12)				
Natural Gas Plant Liquids (NGPL)				
(14) Field Production	47,853	1,544	143,944	1,599
(15) Imports ²	135	4	859	10
(16) Stock Withdrawal (+) or Addition (-) ²	-717	-23	-2,229	-25
(17) Total NGPL Supply	47,271	1,525	142,574	1,584
Other Liquids				
Unfinished Oils and Gasoline Blending Components, Total				
(18) Stock Withdrawal (+) or Addition (-)	559	18	-4,542	-50
(19) Imports	5,955	192	17,486	194
(20) Other Hydrocarbons and Alcohol New Supply (Field Production)	1,193	38	4,347	48
(21) Refinery Processing Gain ¹	13,734	443	42,005	467
(22) Crude Oil Product Supplied	2,156	70	5,769	64
(23) Total Other Liquids	23,597	761	65,065	723
(23) = (18) through (22)				
(24) Total Production of Products ³	407,350	13,140	1,185,052	13,167
(24) = (13) + (17) + (23)				
Net Imports of Refined Products ³				
(25) Imports (Gross)	37,235	1,201	109,270	1,214
(26) Exports	19,445	627	62,887	699
(27) Imports (Net)	17,789	574	46,384	515
(28) Total New Supply of Products	425,139	13,714	1,231,436	13,683
(28) = (24) + (27)				
(29) Refined Products Stock Withdrawal (+) or Addition (-) ³	54,860	1,770	119,891	1,332
(30) Total Petroleum Products Supplied for Domestic Use	479,999	15,484	1,351,327	15,015
(30) = (28) + (29)				
(31) Finished Motor Gasoline	212,138	6,843	566,176	6,291
(32) Distillate Fuel Oil	89,904	2,900	254,742	2,830
(33) Residual Fuel Oil	48,652	1,569	141,362	1,571
(34) Liquefied Petroleum Gases	40,788	1,316	151,335	1,682
(35) Other ⁴	86,361	2,786	231,942	2,577
(36) Crude Oil	2,156	70	5,769	64
(37) Total Product Supplied	480,000	15,484	1,351,327	15,015
(37) = (31) through (36)				
Ending Stocks, All Oils				
(38) Crude Oil and Lease Condensate (Excluding SPR)	358,590	--	358,590	--
(39) Strategic Petroleum Reserve (SPR)	311,830	--	311,830	--
(40) Unfinished Oils	111,262	--	111,262	--
(41) Gasoline Blending Components	41,102	--	41,102	--
(42) Natural Gasoline and Unfractionated Stream	13,697	--	13,697	--
(43) Finished Refined Products ³	538,965	--	538,965	--
(44) Total Stocks	1,375,446	--	1,375,446	--

¹ A balancing item.² Includes isopentane, natural gasoline, unfractionated stream, and plant condensate only.³ For products included see Explanatory Note 9.7.⁴ Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil and liquefied petroleum gases.

E = Estimated.

-- Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1, 2 and 9.7.

Table 2. Supply and Disposition of Crude Oil and Petroleum Products, March 1983
(Thousands of Barrels)

Commodity	Supply			Disposition						
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 268,989	0	69,189	1,733	4,161	54	336,483	5,379	2,156	670,420
Natural Gas Liquids and LRGs	47,403	9,112	5,291	-2,311	0	0	12,637	3,936	42,922	96,506
Natural Gasoline and Isopentane	7,683	0	(s)	103	0	0	5,655	0	2,131	6,368
Unfractionated Stream	902	0	0	-900	0	0	2	0	0	6,031
Plant Condensate	902	0	134	80	0	0	1,114	0	2	1,298
Liquefied Petroleum Gases	37,916	9,112	5,156	-1,594	0	0	5,866	3,936	40,788	82,809
Ethane	7,398	503	1,959	-90	0	0	112	(s)	9,657	5,318
Propane	12,898	7,923	1,507	562	0	0	128	2,435	20,326	41,420
Butane	6,308	710	1,343	-1,711	0	0	2,727	1,501	2,423	14,602
Butane-Propane Mixtures	244	-43	347	34	0	0	126	0	456	1,184
Ethane-Propane Mixtures	8,164	0	0	-240	0	0	0	0	7,924	13,085
Isobutane	2,904	19	0	-149	0	0	2,773	0	1	7,200
Other Liquids	1,193	0	5,955	559	0	0	10,890	0	-3,183	152,364
Other Hydrocarbons and Alcohol	1,193	0	0	-2	0	0	1,191	0	0	284
Unfinished Oils	0	0	4,793	-2,949	0	0	3,604	0	-1,760	111,262
Motor Gasoline Blending Components	0	0	1,161	3,441	0	0	6,044	0	-1,442	40,346
Aviation Gasoline Blending Components	0	0	0	69	0	0	51	0	18	472
Finished Petroleum Products	450	364,632	32,079	56,454	0	0	0	15,509	438,105	456,156
Finished Motor Gasoline	102	182,702	6,360	23,700	0	0	0	726	212,138	183,706
Finished Leaded Motor Gasoline	73	83,322	4,077	13,181	0	0	0	726	99,927	91,292
Finished Unleaded Motor Gasoline	29	99,380	2,283	10,519	0	0	0	0	112,211	92,414
Finished Aviation Gasoline	28	598	(s)	-9	0	0	0	0	617	2,526
Naphtha-Type Jet Fuel	0	7,040	0	-176	0	0	0	1	6,863	7,362
Kerosene-Type Jet Fuel	0	25,241	1,097	-1,585	0	0	0	27	24,726	34,881
Kerosene	2	3,885	81	-97	0	0	0	2	3,869	8,938
Distillate Fuel Oil	1	61,733	1,310	28,693	0	0	0	1,832	89,904	118,717
Residual Fuel Oil	0	25,813	21,273	6,807	0	0	0	5,241	48,652	46,315
Naphtha < 400 Deg. for Petro. Feed, Use	0	4,749	611	102	0	0	0	131	5,331	2,021
Other Oils > 400 Deg. for Petro. Feed, Use	0	9,480	4	-471	0	0	0	215	8,798	2,185
Special Naphthas	123	1,810	462	66	0	0	0	37	2,424	3,043
Lubricants	0	3,960	285	980	0	0	0	411	4,814	13,104
Waxes	0	432	14	35	0	0	0	21	460	771
Petroleum Coke	0	12,018	0	312	0	0	0	6,816	5,514	6,583
Asphalt and Road Oil	0	8,384	81	-2,220	0	0	0	17	6,227	24,354
Still Gas	0	15,318	0	0	0	0	0	0	15,318	0
Miscellaneous Products	194	1,469	502	317	0	0	0	32	2,450	1,650
Total	318,035	373,744	112,513	56,435	4,161	54	360,010	24,924	480,000	1,375,446

¹ Unaccounted for crude oil is a balancing item.

(s) Less than 500 Barrels

E = Estimated.

Note: Totals may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products, January-March 1983
(Thousands of Barrels)

Commodity	Supply				Disposition				Ending Stocks	
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports		Products Supplied
Crude Oil (including lease condensate)	E 779,130	0	223,761	-26,549	23,367	185	977,413	16,341	5,769	670,420
Natural Gas Liquids and LRGs	142,877	25,193	21,974	17,680	0	0	41,330	9,716	156,678	96,506
Natural Gasoline and Isopentane	21,519	0	235	-381	0	0	16,038	0	5,335	6,368
Unfractionated Stream	2,076	0	0	-1,992	0	0	84	0	0	6,031
Plant Condensate	2,251	0	624	144	0	0	3,012	0	7	1,298
Liquefied Petroleum Gases	117,031	25,193	21,115	19,909	0	0	22,196	9,716	151,335	82,809
Ethane	23,111	963	4,654	653	0	0	216	(s)	29,165	5,318
Propane	41,328	23,298	5,157	16,817	0	0	366	6,013	80,221	41,420
Butane	18,695	1,017	5,094	2,080	0	0	12,036	3,703	11,147	14,602
Butane-Propane Mixtures	578	-109	1,977	941	0	0	497	0	2,890	1,184
Ethane-Propane Mixtures	24,870	0	4,232	-1,803	0	0	0	0	27,299	13,085
Isobutane	8,449	24	0	1,221	0	0	9,081	0	613	7,200
Other Liquids	4,347	0	17,486	-4,542	0	0	35,240	0	-17,949	152,364
Other Hydrocarbons and Alcohol	4,347	0	0	27	0	0	4,374	0	0	284
Unfinished Oils	0	0	14,588	-5,985	0	0	18,861	0	-10,258	111,262
Motor Gasoline Blending Components	0	0	2,897	1,396	0	0	11,323	0	-7,030	40,346
Aviation Gasoline Blending Components	0	0	0	20	0	0	682	0	-662	472
Finished Petroleum Products	1,067	1,070,795	88,156	99,982	0	0	0	53,170	1,206,830	456,156
Finished Motor Gasoline	255	532,907	14,929	18,831	0	0	0	746	566,176	183,706
Finished Leaded Motor Gasoline	181	239,960	8,604	10,863	0	0	0	746	258,862	91,292
Finished Unleaded Motor Gasoline	74	292,947	6,325	7,968	0	0	0	0	307,314	92,414
Finished Aviation Gasoline	91	1,736	209	-212	0	0	0	0	1,824	2,526
Naphtha-Type Jet Fuel	0	19,337	0	-173	0	0	0	1	19,163	7,362
Kerosene-Type Jet Fuel	0	72,298	0	-2,880	0	0	0	522	71,051	34,881
Kerosene	9	11,778	155	1,854	0	0	0	3	13,793	8,938
Distillate Fuel Oil	6	193,271	4,728	66,862	0	0	0	10,125	254,742	118,717
Residual Fuel Oil	0	78,788	60,374	21,914	0	0	0	19,713	141,362	46,315
Naphtha < 400 Deg. for Petro. Feed, Use	0	11,558	1,383	-54	0	0	0	295	12,593	2,021
Other Oils > 400 Deg. for Petro. Feed, Use	0	24,048	4	-5	0	0	0	1,069	22,979	2,185
Special Naphthas	194	4,586	1,488	431	0	0	0	327	6,371	3,043
Lubricants	0	11,889	781	77	0	0	0	1,204	11,543	13,104
Waxes	0	1,269	95	15	0	0	0	63	1,316	771
Petroleum Coke	0	35,746	0	138	0	0	0	18,891	16,993	6,583
Asphalt and Road Oil	0	20,672	213	-7,085	0	0	0	123	13,677	24,354
Still Gas	0	45,411	0	0	0	0	0	0	45,411	0
Miscellaneous Products	512	5,501	1,642	269	0	0	0	89	7,835	1,650
Total	927,421	1,095,988	351,376	86,571	23,367	185	1,053,983	79,228	1,351,323	1,375,446

¹ Unaccounted for crude oil is a balancing item.

(s) Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, March 1983
(Thousand Barrels per Day)

Commodity	Supply					Disposition			
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) Addition (-)	Unaccounted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	8,677	0	2,232	56	134	2	10,854	174	70
Natural Gas Liquids and LRGs	1,529	294	171	-75	0	0	408	127	1,385
Natural Gasoline and Isopentane	248	0	(s)	3	0	0	182	0	69
Unfractionated Stream	29	0	0	-29	0	0	(s)	0	(s)
Plant Condensate	29	0	4	3	0	0	36	0	0
Liquefied Petroleum Gases	1,223	294	166	-51	0	0	189	127	1,316
Ethane	239	16	63	-3	0	0	4	(s)	312
Propane	416	256	49	18	0	0	4	79	656
Butane	203	23	43	-55	0	0	88	48	78
Butane-Propane Mixtures	8	-1	11	1	0	0	4	0	15
Ethane-Propane Mixtures	263	0	0	-8	0	0	0	0	256
Isobutane	94	1	0	-5	0	0	89	0	(s)
Other Liquids	38	0	192	18	0	0	351	0	-103
Other Hydrocarbons and Alcohol	38	0	0	(s)	0	0	38	0	0
Unfinished Oils	0	0	155	-95	0	0	116	0	-57
Motor Gasoline Blending Components	0	0	37	111	0	0	195	0	-47
Aviation Gasoline Blending Components	0	0	0	2	0	0	2	0	1
Finished Petroleum Products	15	11,762	1,035	1,821	0	0	0	500	14,132
Finished Motor Gasoline	3	5,894	205	765	0	0	0	23	6,843
Finished Leaded Motor Gasoline	2	2,688	132	425	0	0	0	23	3,223
Finished Unleaded Motor Gasoline	1	3,206	74	339	0	0	0	0	3,620
Finished Aviation Gasoline	1	19	(s)	(s)	0	0	0	0	20
Naphtha-Type Jet Fuel	0	227	0	-6	0	0	0	(s)	221
Kerosene-Type Jet Fuel	0	814	35	-51	0	0	0	1	798
Kerosene	(s)	125	3	-3	0	0	0	(s)	125
Distillate Fuel Oil	(s)	1,991	42	926	0	0	0	59	2,900
Residual Fuel Oil	0	833	686	220	0	0	0	169	1,569
Naphtha < 400 Deg. for Petro. Feed. Use	0	153	20	3	0	0	0	4	172
Other Oils > 400 Deg. for Petro. Feed. Use	0	306	(s)	-15	0	0	0	7	284
Special Naphthas	4	58	15	2	0	0	0	1	78
Lubricants	0	128	9	32	0	0	0	13	155
Waxes	0	14	(s)	1	0	0	0	1	15
Petroleum Coke	0	388	0	10	0	0	0	220	178
Asphalt and Road Oil	0	270	3	-72	0	0	0	1	201
Still Gas	0	494	0	0	0	0	0	0	494
Miscellaneous Products	6	47	16	10	0	0	0	1	79
Total	10,259	12,056	3,629	1,820	134	2	11,613	801	15,484

¹ Unaccounted for crude oil is a balancing item.

(s) Less than 500 Barrels per day.

E = Estimated.

Note: Totals may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-March 1983
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Stock With-drawal(+) Addition(-)	Unac-counted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 8,657	0	2,486	-295	260	2	10,860	182	64
Natural Gas Liquids and LRGs	1,588	280	244	196	0	0	459	108	1,741
Natural Gasoline and Isopentane	239	0	3	-4	0	0	178	0	59
Unfractionated Stream	23	0	0	-22	0	0	1	0	(s)
Plant Condensate	25	0	7	2	0	0	33	0	(s)
Liquefied Petroleum Gases	1,300	280	235	221	0	0	247	108	1,682
Ethane	257	11	52	7	0	0	2	(s)	324
Propane	459	259	57	187	0	0	4	67	891
Butane	208	11	57	23	0	0	134	41	124
Butane-Propane Mixtures	6	-1	22	10	0	0	6	0	32
Ethane-Propane Mixtures	276	0	47	-20	0	0	0	0	303
Isobutane	94	(s)	0	14	0	0	101	0	7
Other Liquids	48	0	194	-50	0	0	392	0	-199
Other Hydrocarbons and Alcohol ¹	48	0	0	(s)	0	0	49	0	0
Unfinished Oils	0	0	162	-66	0	0	210	0	-114
Motor Gasoline Blending Components	0	0	32	16	0	0	126	0	-78
Aviation Gasoline Blending Components	0	0	0	(s)	0	0	8	0	-7
Finished Petroleum Products	12	11,898	980	1,111	0	0	0	591	13,409
Finished Motor Gasoline	3	5,921	166	209	0	0	0	8	6,291
Finished Leaded Motor Gasoline	2	2,666	96	121	0	0	0	8	2,876
Finished Unleaded Motor Gasoline	1	3,255	70	89	0	0	0	0	3,415
Finished Aviation Gasoline	1	19	2	-2	0	0	0	0	20
Naphtha-Type Jet Fuel	0	215	0	-2	0	0	0	(s)	213
Kerosene-Type Jet Fuel	0	803	24	-32	0	0	0	6	789
Kerosene	(s)	131	2	21	0	0	0	(s)	153
Distillate Fuel Oil	(s)	2,147	53	743	0	0	0	112	2,830
Residual Fuel Oil	0	875	671	243	0	0	0	219	1,571
Naphtha < 400 Deg. for Petro. Feed. Use	0	128	15	-1	0	0	0	3	140
Other Oils > 400 Deg. for Petro. Feed. Use	0	267	(s)	(s)	0	0	0	12	255
Special Naphthas	2	51	17	5	0	0	0	4	71
Lubricants	0	132	9	1	0	0	0	13	128
Waxes	0	14	1	(s)	0	0	0	1	15
Petroleum Coke	0	397	0	2	0	0	0	210	189
Asphalt and Road Oil	0	230	2	-79	0	0	0	1	152
Still Gas	0	505	0	0	0	0	0	0	505
Miscellaneous Products	6	61	18	3	0	0	0	1	87
Total	10,305	12,178	3,904	962	260	2	11,711	880	15,015

¹ Unaccounted for crude oil is a balancing item.

(s) Less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 6. PAD District I, Supply and Disposition of Crude Oil and Petroleum Products, March 1983
(Thousands of Barrels)

Commodity	Supply				Disposition					Ending Stocks	
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs	Exports		Products Supplied
Crude Oil (including lease condensate)	E 2,542	0	17,991	1,329	687	5,180	0	27,729	0	0	15,911
Natural Gas Liquids and LRGs	883	1,193	321	1,115	0	2,264	0	218	87	5,471	4,123
Liquefied Petroleum Gases	625	1,193	264	1,121	0	2,264	0	49	87	5,331	4,088
Other Products ²	258	0	57	-6	0	0	0	169	0	140	35
Other Liquids	112	0	2,660	1,093	0	1,493	0	4,398	0	960	17,191
Other Hydrocarbons and Alcohol	112	0	0	2	0	0	0	114	0	0	50
Unfinished Oils	0	0	2,114	-98	0	1,422	0	2,902	0	536	13,131
Motor Gasoline Blending Components	0	0	545	1,194	0	71	0	1,387	0	423	4,005
Aviation Gasoline Blending Components	0	0	0	-5	0	0	0	-5	0	0	5
Finished Petroleum Products	60	32,758	26,567	31,067	0	67,619	0	0	792	157,278	134,950
Finished Motor Gasoline	60	16,282	4,938	9,400	0	40,322	0	0	1	71,001	51,411
Finished Leaded Motor Gasoline	44	6,027	2,863	5,044	0	15,927	0	0	1	29,904	24,724
Finished Unleaded Motor Gasoline	16	10,255	2,075	4,356	0	24,395	0	0	0	41,097	26,687
Finished Aviation Gasoline	0	0	(s)	14	0	203	0	0	0	217	482
Naphtha-Type Jet Fuel	0	644	0	-131	0	492	0	0	1	1,004	978
Kerosene-Type Jet Fuel	0	597	997	-170	0	8,450	0	0	(s)	9,874	9,068
Kerosene	0	394	81	227	0	783	0	0	2	1,483	3,748
Distillate Fuel Oil	0	6,384	1,055	17,157	0	13,547	0	0	3	38,140	38,112
Residual Fuel Oil	0	3,179	19,300	4,469	0	2,298	0	0	198	29,048	20,605
Naphtha and Other Oils for Petrochem. Feedstock	0	337	7	-12	0	54	0	0	104	282	61
Special Naphthas	0	38	21	131	0	270	0	0	3	457	732
Lubricants	0	575	95	225	0	720	0	0	146	1,469	3,335
Waxes	0	86	4	11	0	4	0	0	5	100	171
Petroleum Coke	0	1,070	0	284	0	0	0	0	313	1,041	585
Asphalt and Road Oil	0	1,394	68	-574	0	202	0	0	2	1,088	5,322
Still Gas	0	1,477	0	0	0	0	0	0	0	1,477	0
Miscellaneous Products	0	301	2	36	0	274	0	0	14	598	340
Total	3,597	33,951	47,539	34,604	687	76,556	0	32,345	880	163,709	172,175

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 7. PAD District II Supply and Disposition of Crude Oil and Petroleum Products, March 1983
(Thousands of Barrels)

Commodity	Supply					Disposition					
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 32,051	0	11,252	1,080	35,849	1,061	0	79,874	1,420	0	82,900
Natural Gas Liquids and LRGs	9,365	2,360	3,717	-1,343	0	2,098	0	3,951	1,401	10,845	32,294
Liquefied Petroleum Gases	9,233	2,360	3,717	-602	0	1,026	0	2,428	1,401	11,905	28,121
Other Products ²	132	0	0	-741	0	1,072	0	1,523	0	-1,060	4,173
Other Liquids	337	0	632	-313	0	1,381	0	1,188	0	849	27,481
Other Hydrocarbons and Alcohol	337	0	0	1	0	0	0	338	0	0	112
Unfinished Oils	0	0	539	-1,519	0	431	0	-1,038	0	489	17,941
Motor Gasoline Blending Components	0	0	94	1,154	0	950	0	1,855	0	343	9,307
Aviation Gasoline Blending Components	0	0	0	51	0	0	0	33	0	18	121
Finished Petroleum Products	8	85,812	1,141	15,214	0	10,313	0	0	193	112,296	129,744
Finished Motor Gasoline	0	51,947	149	7,819	0	7,134	0	0	15	67,034	58,965
Finished Leaded Motor Gasoline	0	26,040	149	4,569	0	3,214	0	0	15	33,957	30,383
Finished Unleaded Motor Gasoline	0	25,907	0	3,250	0	3,920	0	0	0	33,077	28,582
Finished Aviation Gasoline	0	202	0	-33	0	122	0	0	0	291	708
Naphtha-Type Jet Fuel	0	976	0	-69	0	149	0	0	0	1,056	1,747
Naphtha-Type Jet Fuel	0	4,264	0	222	0	704	0	0	0	5,190	6,910
Kerosene	0	259	0	6	0	75	0	0	0	340	2,503
Distillate Fuel Oil	0	15,267	151	7,394	0	1,867	0	0	0	24,679	38,977
Residual Fuel Oil	0	1,976	698	916	0	-76	0	0	0	3,514	3,587
Naphtha and Other Oils for Petro. Feed.	0	524	28	13	0	54	0	0	32	587	286
Special Naphthas	0	447	94	40	0	83	0	0	2	662	558
Lubricants	0	716	7	7	0	155	0	0	12	874	2,431
Waxes	0	49	2	-2	0	0	0	0	1	48	76
Petroleum Coke	0	3,040	0	110	0	0	0	0	127	3,023	1,860
Asphalt and Road Oil	0	2,755	6	-1,253	0	222	0	0	2	1,727	10,962
Still Gas	0	3,217	0	0	0	0	0	0	0	3,217	0
Miscellaneous Products	8	173	7	44	0	-176	0	0	2	54	174
Total	41,761	88,172	16,743	14,638	35,849	14,853	0	85,013	3,013	123,990	272,419

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 8. PAD District III Supply and Disposition of Crude Oil and Petroleum Products, March 1983
(Thousands of Barrels)

Commodity	Supply				Disposition						
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 128,114	0	36,051	-856	-22,425	18,501	19	159,330	0	36	469,400
Natural Gas Liquids and LRGs	33,888	4,314	347	-2,194	0	-3,590	0	7,168	2,326	23,271	57,438
Liquefied Petroleum Gases	26,585	4,314	347	-2,133	0	-3,414	0	2,558	2,326	20,815	48,593
Other Products ²	7,303	0	0	-61	0	-176	0	4,610	0	2,456	8,845
Other Liquids	421	0	2,598	-1,606	0	-2,874	0	3,857	0	-5,318	67,243
Other Hydrocarbons and Alcohol	421	0	0	-4	0	0	0	417	0	0	116
Unfinished Oils	0	0	2,135	-1,149	0	-1,853	0	1,833	0	-2,700	49,824
Motor Gasoline Blending Components	0	0	463	-473	0	-1,021	0	1,587	0	-2,618	17,003
Aviation Gasoline Blending Components	0	0	0	20	0	0	0	20	0	0	300
Finished Petroleum Products	336	171,620	2,304	2,242	0	-81,484	0	0	6,947	88,072	122,950
Finished Motor Gasoline	0	80,708	174	818	0	-49,309	0	0	31	32,359	49,250
Finished Leaded Motor Gasoline	0	35,584	174	278	0	-20,105	0	0	31	15,899	24,226
Finished Unleaded Motor Gasoline	0	45,124	0	540	0	-29,204	0	0	0	16,460	25,024
Finished Aviation Gasoline	28	277	0	23	0	-353	0	0	0	-25	663
Naphtha-Type Jet Fuel	0	3,523	0	-26	0	-818	0	0	0	2,679	2,500
Kerosene-Type Jet Fuel	0	13,100	0	-1,572	0	-9,930	0	0	0	1,598	11,714
Kerosene	2	2,968	0	-375	0	-858	0	0	(s)	1,737	2,309
Distillate Fuel Oil	1	28,999	5	1,687	0	-15,860	0	0	591	14,242	27,248
Residual Fuel Oil	0	10,089	677	1,231	0	-2,526	0	0	2,339	7,132	12,750
Naphtha and Other Oils for Petro. Feed.	0	12,717	580	-204	0	-108	0	0	204	12,781	3,193
Special Naphthas	123	1,184	332	-72	0	-353	0	0	30	1,184	1,481
Lubricants	0	2,317	49	640	0	-865	0	0	196	1,944	5,944
Waxes	0	225	2	30	0	-4	0	0	11	241	455
Petroleum Coke	0	4,721	0	-202	0	0	0	0	3,530	989	924
Asphalt and Road Oil	0	2,899	0	27	0	-424	0	0	2	2,500	3,670
Still Gas	0	7,076	0	0	0	0	0	0	0	7,076	0
Miscellaneous Products	182	817	485	237	0	-76	0	0	12	1,634	849
Total	162,759	175,934	41,301	-2,414	-22,425	-69,447	19	170,355	9,273	106,061	717,031

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 9. PAD District IV Supply and Disposition of Crude Oil and Petroleum Products, March 1983
(Thousands of Barrels)

Commodity	Supply				Disposition						
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 17,723	0	827	899	-8,054	0	0	11,395	0	0	16,154
Natural Gas Liquids and LRGs	2,262	125	490	100	0	-772	0	493	0	1,712	1,103
Liquefied Petroleum Gases	866	125	412	62	0	124	0	311	0	1,278	522
Other Products ²	1,396	0	78	38	0	-896	0	182	0	434	581
Other Liquids	21	0	59	116	0	0	0	-616	0	812	5,510
Other Hydrocarbons and Alcohol	21	0	0	0	0	0	0	21	0	0	0
Unfinished Oils	0	0	0	-173	0	0	0	-838	0	665	2,774
Motor Gasoline Blending Components	0	0	59	289	0	0	0	201	0	147	2,736
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0
Finished Petroleum Products	46	11,589	(s)	1,154	0	393	0	0	2	13,181	13,953
Finished Motor Gasoline	42	6,053	0	834	0	207	0	0	0	7,136	5,609
Finished Leaded Motor Gasoline	29	3,806	0	548	0	-44	0	0	0	4,339	3,592
Finished Unleaded Motor Gasoline	13	2,247	0	286	0	251	0	0	0	2,797	2,017
Finished Aviation Gasoline	0	14	0	9	0	12	0	0	0	35	57
Naphtha-Type Jet Fuel	0	416	0	-11	0	-121	0	0	0	284	343
Kerosene-Type Jet Fuel	0	678	0	-65	0	500	0	0	0	1,113	774
Kerosene	0	32	0	8	0	0	0	0	0	40	39
Distillate Fuel Oil	0	2,728	0	725	0	-205	0	0	0	3,248	3,266
Residual Fuel Oil	0	309	0	0	0	0	0	0	0	309	445
Naphtha and Other Oils for Petro. Feed.	0	-5	0	-1	0	0	0	0	(s)	-6	1
Special Naphthas	0	4	(s)	-3	0	0	0	0	1	21	60
Lubricants	0	3	0	19	0	0	0	0	0	9	7
Waxes	0	8	0	1	0	0	0	0	0	0	0
Petroleum Coke	0	364	0	-14	0	0	0	0	0	350	831
Asphalt and Road Oil	0	572	0	-347	0	0	0	0	1	224	2,509
Still Gas	0	388	0	0	0	0	0	0	0	388	0
Miscellaneous Products	4	25	(s)	-1	0	0	0	0	(s)	28	2
Total	20,052	11,714	1,376	2,269	-8,054	-379	0	11,272	2	15,705	36,720

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 10. PAD District V Supply and Disposition of Crude Oil and Petroleum Products, March 1983
(Thousands of Barrels)

Commodity	Supply					Disposition					
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 88,559	0	3,068	-719	-1,897	-24,742	35	58,155	3,959	2,120	86,055
Natural Gas Liquids and LRGs	1,005	1,120	415	11	0	0	0	807	121	1,623	1,548
Liquefied Petroleum Gases	607	1,120	415	-42	0	0	0	520	121	1,459	1,485
Other Products ²	398	0	0	53	0	0	0	287	0	164	63
Other Liquids	302	0	5	1,269	0	0	0	2,063	0	-487	34,939
Other Hydrocarbons and Alcohol	302	0	0	-1	0	0	0	301	0	0	6
Unfinished Oils	0	0	5	-10	0	0	0	745	0	-750	27,592
Motor Gasoline Blending Components	0	0	0	1,277	0	0	0	1,014	0	263	7,295
Aviation Gasoline Blending Components	0	0	0	3	0	0	0	3	0	0	46
Finished Petroleum Products	0	62,853	2,066	6,777	0	3,159	0	0	7,576	67,279	54,559
Finished Motor Gasoline	0	27,712	1,099	4,829	0	1,646	0	0	678	34,608	18,471
Finished Leaded Motor Gasoline	0	11,865	891	2,742	0	1,008	0	0	678	15,828	8,367
Finished Unleaded Motor Gasoline	0	15,847	208	2,087	0	638	0	0	0	18,780	10,104
Finished Aviation Gasoline	0	105	0	-22	0	16	0	0	0	99	616
Naphtha-Type Jet Fuel	0	1,481	0	61	0	298	0	0	0	1,840	1,794
Kerosene-Type Jet Fuel	0	6,602	100	0	0	276	0	0	0	6,951	6,415
Kerosene	0	232	(s)	37	0	0	0	0	27	269	339
Distillate Fuel Oil	0	8,355	98	1,730	0	651	0	0	1,239	9,596	11,114
Residual Fuel Oil	0	10,260	598	191	0	304	0	0	2,703	8,650	8,928
Naphtha and Other Oils for Petro. Feed	0	656	1	-165	0	0	0	0	6	486	665
Special Naphthas	0	137	15	-30	0	0	0	0	1	120	262
Lubricants	0	349	134	89	0	-10	0	0	56	505	1,334
Waxes	0	64	7	-5	0	0	0	0	4	61	62
Petroleum Coke	0	2,823	0	134	0	0	0	0	2,846	111	2,383
Asphalt and Road Oil	0	764	7	-73	0	0	0	0	11	687	1,891
Still Gas	0	3,160	0	0	0	0	0	0	0	3,160	0
Miscellaneous Products	0	153	8	1	0	-22	0	0	4	136	285
Total	89,866	63,973	5,554	7,338	-1,897	-21,583	35	61,025	11,656	70,535	177,101

¹ Unaccounted for crude oil is a balancing item.² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 11. Production of Crude Oil (including Lease Condensate) by PAD District and State, for the Most Current Available Month,¹ January 1983
(Thousands of Barrels)

PAD District and State	Production	
	Total	Daily Average
PAD District I		
Florida	1,897	61
New York	E 71	2
Pennsylvania	E 364	12
Virginia	E 4	(s)
West Virginia	289	9
Adjustment 2	-12	(s)
Total PAD District I	E 2,613	84
PAD District II		
Illinois	2,400	77
Indiana	397	13
Kansas	6,304	203
Kentucky	711	23
Michigan	2,919	94
Missouri	E 17	1
Nebraska	562	18
North Dakota	4,330	140
Ohio	E 1,238	40
Oklahoma	12,848	414
South Dakota	93	3
Tennessee	94	3
Adjustment 2	76	2
Total PAD District II	E 31,989	1,032
PAD District III		
Alabama	1,732	56
Arkansas	E 1,601	52
Louisiana	36,386	1,174
Gulf Coast	2,907	94
Rest Of State	39,293	1,268
Total Louisiana	2,593	84
Mississippi		
New Mexico	568	18
Northwestern	5,685	183
Southeastern	6,253	202
Total New Mexico		
Texas	2,083	67
TRRC District 01	3,370	109
TRRC District 02	11,384	367
TRRC District 03	2,434	79
TRRC District 04	714	23
TRRC District 05	4,408	142
TRRC District 06, excluding East Texas	2,794	90
TRRC District 07B	2,933	95
TRRC District 07C	19,452	625
TRRC District 08	19,370	103
TRRC District 08A	3,207	60
TRRC District 09	1,845	115
TRRC District 10	3,569	2,502
East Texas	77,563	-15
Total Texas	-472	4,147
Adjustment 2		
Total PAD District III	E 128,563	

—Continued

PAD District and State	Production	
	Total	Daily Average
PAD District IV		
Colorado	E 2,590	84
Montana	E 2,626	85
Utah	E 1,992	64
Wyoming	E 9,936	321
Adjustment 2	-140	-5
Total PAD District IV	E 17,004	549
PAD District V		
Alaska	2,266	73
South Alaska	51,426	1,659
North Slope	-1,051	-34
Adjustment for Alaska ²	E 52,641	1,698
Total Alaska	25	1
Arizona		
California	6,568	212
Central Coastal	20,634	666
East Central	16	1
North	6,722	217
South	33,940	1,095
Total California	58	2
Nevada	827	27
Adjustment for Arizona, California, and Nevada ²	E 87,491	2,822
TOTAL PAD DISTRICT V	E 267,660	8,634
United States Total		

¹ Includes the following offshore production (thousands of barrels):

Alaska: 2,000;
California: Federal- 2,638, State- 3,290;
Louisiana: Federal- 24,127, State- 2,026;
Texas: Federal- 1,787, State- 142;
U.S. Total- 36,010.

² These adjustments are used to reconcile the national and PADD level sums of the State data with the independently estimated U.S. and Alaskan figures shown in the Summary Statistics portion of this issue and with the PADD level figures published in a previous issue. Final data at the State, PAD District and national levels will be published without adjustments in the Petroleum Supply Annual.

(s) Less than 500 barrels.
E = Estimated.
Sources: See Explanatory Notes on Data Collection and Estimation.

Table 12. Natural Gas Processing Plant Production of Petroleum Products by PAD District, March 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States			
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico		Total	Rocky Mt.	Dist. V West Coast
Natural Gas Liquids	394	489	883	2	2,079	438	6,846	9,365	18,841	3,050	7,750	735	3,512	33,888	2,262	1,005	47,403
Natural Gasoline and Isopentane	58	33	91	0	64	70	1,189	1,323	2,103	1,957	1,153	93	293	5,599	295	375	7,683
Unfractionated Stream	34	133	167	2	909	81	-2,308	-1,316	8,828	-10,979	893	225	2,089	1,056	972	23	90
Plant Condensate	0	0	0	0	52	26	47	125	217	382	28	16	5	648	129	0	902
Liquefied Petroleum Gases	302	323	625	0	1,054	261	7,918	9,233	7,693	11,690	5,676	401	1,125	26,585	866	607	37,916
Ethane	0	169	169	0	457	0	1,024	1,481	811	2,855	1,938	33	84	5,721	27	0	7,398
Propane	184	102	286	0	421	167	2,680	3,268	2,615	3,353	1,893	118	502	8,481	507	356	12,898
Butane	98	34	132	0	82	82	1,080	1,244	1,405	1,862	748	144	275	4,434	294	204	6,308
Butane-Propane Mixtures	0	0	0	0	1	0	70	71	56	38	1	12	0	107	31	35	244
Ethane-Propane Mixtures	0	0	0	0	40	0	2,668	2,708	2,262	2,492	528	0	174	5,456	0	0	8,164
Isobutane	20	18	38	0	53	12	396	461	544	1,090	568	94	90	2,386	7	12	2,904
Finished Petroleum Products	60	0	60	0	2	0	6	8	322	1	1	8	4	336	46	0	450
Finished Motor Gasoline	60	0	60	0	0	0	0	0	0	0	0	0	0	0	42	0	102
Finished Leaded Motor Gasoline	44	0	44	0	0	0	0	0	0	0	0	0	0	0	29	0	73
Finished Unleaded Motor Gasoline	16	0	16	0	0	0	0	0	0	0	0	0	0	0	13	0	28
Finished Aviation Gasoline	0	0	0	0	0	0	0	0	28	0	0	0	0	28	0	0	0
Naphtha-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Distillate Fuel Oil	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	1
Special Naphthas	0	0	0	0	0	0	0	0	123	0	0	0	0	0	1	0	123
Miscellaneous Products	0	0	0	0	0	0	6	8	170	1	1	8	2	182	4	0	194
Total Production	454	489	943	2	2,081	438	6,852	9,373	19,163	3,051	7,751	743	3,516	34,224	2,308	1,005	47,853

¹ Production represents quantity of natural gas processing plant output less input to fractionating facilities.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 13. Refinery Input of Crude Oil and Petroleum Products by PAD District, March 1983
(Thousands of Barrels, Except Where Noted)

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States			
	East Coast #1	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico		Total	Rocky Mt.	Dist. V West Coast
Crude Oil (including lease condensate)	25,802	1,927	27,729	1,451	51,600	7,416	19,407	79,874	14,469	83,403	54,340	4,749	2,369	159,330	11,395	58,155	336,483
Natural Gas Liquids																	
Natural Gasoline and Isopentane	169	0	169	0	462	102	841	1,405	930	2,037	591	61	100	3,719	75	287	5,655
Unfractionated Stream	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	2
Plant Condensate	0	0	0	0	108	0	10	118	32	598	13	245	1	889	107	0	1,114
Liquefied Petroleum Gases	43	6	49	59	1,516	185	668	2,428	394	810	1,236	65	53	2,558	311	520	5,866
Ethane	0	0	0	0	0	0	0	0	0	14	93	0	0	107	5	0	112
Propane	0	0	0	0	58	0	0	58	0	2	62	0	0	64	6	0	128
Butane	0	0	0	0	880	135	268	1,306	137	392	361	0	8	898	172	351	2,727
Butane-Propane Mixtures	0	0	0	0	0	0	0	0	7	20	0	0	26	53	73	0	126
Ethane-Propane Mixtures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Isobutane	43	6	49	36	578	50	400	1,064	250	382	720	65	19	1,436	55	169	2,773
Other Liquids																	
Other Hydrocarbons and Alcohol	114	0	114	0	318	0	20	338	0	237	180	0	0	417	21	301	1,191
Unfinished Oil (net)	2,962	-60	2,902	-13	-859	-34	-132	-1,038	720	55	759	197	102	1,833	-838	745	3,604
Motor Gasoline Blending Components (net)	1,353	34	1,387	-8	876	-194	1,181	1,855	-297	705	1,110	0	69	1,587	201	1,014	6,044
Aviation Gasoline Blending Components (net)	-5	0	-5	0	38	0	-5	33	5	11	4	0	0	20	0	3	51
Total Input to Refineries	30,438	1,907	32,345	1,489	54,059	7,475	21,990	85,013	16,253	87,858	58,233	5,317	2,694	170,355	11,272	61,025	360,010
Crude Oil Distillation																	
Gross Input (daily average)	877	62	939	49	1,690	244	635	2,617	486	2,766	1,765	164	76	5,257	381	1,923	11,118
Operable Capacity (daily average)	1,471	174	1,645	66	2,342	295	854	3,557	610	4,056	2,882	297	106	7,952	561	3,134	16,848
Operating Ratio (percent) ¹	59.6	35.7	57.1	73.8	72.2	82.6	74.4	73.6	79.6	68.2	61.2	55.1	72.5	66.1	68.0	61.4	66.0
Crude Oil Qualities																	
Sulfur Content, Weighted Average (percent) .....	.97	.23	.92	.64	.83	1.67	.61	.85	.75	.93	.73	1.53	.30	.85	.96	1.02	.89
API Gravity, Weighted Average	29.67	30.68	29.75	36.80	31.61	21.75	37.21	32.15	37.83	30.97	33.88	32.67	39.41	32.76	32.86	25.33	31.08
Operable Capacity (daily average)																	
Operating	1,471	174	1,645	66	2,342	295	854	3,557	610	4,056	2,882	297	106	7,952	561	3,134	16,848
Idle	1,280	106	1,386	66	2,188	295	768	3,317	590	3,219	2,338	226	101	6,474	521	2,858	14,556
Total	191	69	260	0	154	0	86	240	20	837	545	72	4	1,478	40	276	2,292

¹ Represents gross input divided by operable capacity.

Note: Total may not equal sum of components due to independent rounding.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 14. Refinery Production of Petroleum Products by PAD District, March 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III			Total		PAD District IV		PAD District V		United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okl., Kans., Mo.	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	Dist. IV	Dist. V		
Liquefied Refinery Gases	1,184	9	1,193	28	1,637	203	492	2,360	238	2,787	1,150	62	77	4,314	125	1,120	9,112	
For Petrochemical Feedstock Use	313	0	313	0	224	2	41	267	28	1,320	-33	16	0	1,331	1	112	2,024	
For Other Uses	871	9	880	28	1,413	201	451	2,093	210	1,467	1,183	46	77	2,983	124	1,008	7,088	
Ethane	26	0	26	0	0	0	0	0	0	473	1	0	0	474	5	-2	503	
For Petrochemical Feedstock Use	0	0	0	0	0	0	0	0	0	227	1	0	0	228	0	0	228	
For Other Uses	26	0	26	0	0	0	0	0	0	246	0	0	0	246	5	-2	275	
Propane	1,039	9	1,048	28	1,617	217	503	2,365	211	2,252	1,122	35	44	3,664	145	701	7,923	
For Petrochemical Feedstock Use	313	0	313	0	224	0	41	265	28	910	-21	0	0	917	0	99	1,594	
For Other Uses	726	9	735	28	1,393	217	462	2,100	183	1,342	1,143	35	44	2,747	145	602	6,329	
Butane	119	0	119	0	19	-14	-11	-6	19	-72	281	25	11	264	-23	356	710	
For Petrochemical Feedstock Use	0	0	0	0	0	2	0	2	0	165	-13	16	0	168	0	13	183	
For Other Uses	119	0	119	0	19	-16	-11	-8	19	-237	294	9	11	96	-23	343	527	
Butane-Propane Mixtures	0	0	0	0	1	0	0	1	8	116	-254	2	22	-106	-3	65	-43	
For Petrochemical Feedstock Use	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
For Other Uses	0	0	0	0	1	0	0	1	8	116	-254	2	22	-106	-3	65	-43	
Isobutane for Petro. Feed. Use	0	0	0	0	0	0	0	0	0	18	0	0	0	18	1	0	19	
Finished Motor Gasoline	15,629	653	16,282	958	33,418	4,160	13,411	51,947	8,463	41,349	28,108	1,652	1,136	80,708	6,053	27,712	182,702	
Finished Leaded Motor Gasoline	5,676	351	6,027	500	14,884	2,106	8,550	26,040	4,316	17,279	12,479	850	660	35,584	3,806	11,865	83,322	
Finished Unleaded Motor Gasoline	9,953	302	10,255	458	18,534	2,054	4,861	25,907	4,147	24,070	15,629	802	476	45,124	2,247	15,847	99,380	
Finished Aviation Gasoline	0	0	0	0	177	0	25	202	0	118	159	0	0	277	14	105	598	
Naphtha-Type Jet Fuel	603	41	644	31	504	74	367	976	776	1,631	471	167	478	3,523	416	1,481	7,040	
Kerosene-Type Jet Fuel	597	0	597	112	3,106	360	686	4,264	778	5,999	6,272	5	46	13,100	678	6,602	25,241	
Kerosene	334	60	394	0	212	5	42	259	41	1,516	1,378	11	22	2,968	32	232	3,885	
Distillate Fuel Oil	5,895	489	6,384	209	8,767	1,626	4,665	15,267	3,274	15,134	8,457	1,389	745	28,999	2,728	8,355	61,733	
Residual Fuel Oil	3,061	118	3,179	36	1,378	194	368	1,976	711	5,304	3,649	338	87	10,089	309	10,260	25,813	
Naphtha < 400 Deg. For Petro. Feed. Use	332	0	332	0	252	0	76	328	526	3,077	419	16	0	4,038	0	51	4,749	
Other Oils > 400 Deg. For Petro. Feed. Use	5	0	5	0	195	0	1	196	36	4,355	4,264	24	0	8,679	-5	605	9,480	
Special Naphthas	14	24	38	0	297	0	150	447	128	888	24	144	0	1,184	4	137	1,810	
Lubricants	311	264	575	0	403	0	313	716	14	1,342	670	291	0	2,317	3	349	3,960	
Wax	21	65	86	0	20	0	29	49	7	95	59	64	0	225	8	64	432	
Petroleum Coke	1,055	15	1,070	23	1,989	324	704	3,040	290	2,521	1,838	64	8	4,721	364	2,823	12,018	
Marketable	352	0	352	0	1,147	209	474	1,830	56	1,216	1,111	56	0	2,439	121	2,148	6,890	
Catalyst	703	15	718	23	842	115	230	1,210	234	1,305	727	8	8	2,282	243	675	5,128	
Asphalt and Road Oil	1,352	42	1,394	99	1,589	572	495	2,755	567	429	906	913	84	2,899	572	764	8,384	
Still Gas	1,407	70	1,477	58	2,046	268	845	3,217	426	4,336	2,078	187	49	7,076	388	3,160	15,318	
For Petrochemical Feedstock Use	87	0	87	0	1	0	0	1	5	552	43	0	0	600	1	61	750	
For Other Uses	1,320	70	1,390	58	2,045	268	845	3,216	421	3,784	2,035	187	49	6,476	387	3,099	14,568	
Miscellaneous Products	290	11	301	1	70	27	75	173	88	424	262	43	0	817	25	153	1,469	
Fuel Use	7	0	7	0	1	0	15	16	0	1	244	0	0	245	3	12	283	
Non-Fuel Use	283	11	294	1	69	27	60	157	88	423	18	43	0	572	22	141	1,186	
Total Production	32,090	1,861	33,951	1,555	56,060	7,813	22,744	88,172	16,363	91,305	60,164	5,370	2,732	175,934	11,714	63,973	373,744	
Processing Gain(-) or Loss(+) ¹	-1,652	46	-1,606	-66	-2,001	-338	-754	-3,159	-110	-3,447	-1,931	-53	-38	-5,579	-442	-2,948	-13,734	

¹ Represents the arithmetic difference between input and output.

Note: See Explanatory Note on negative production.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 15. Percent Refinery Yield of Petroleum Products by PAD District,¹ March 1983

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	
Finished Motor Gasoline ²	48.5	32.8	47.5	63.1	59.4	55.1	55.5	58.1	44.3	45.3	25.9	36.9	44.4	47.9
Finished Aviation Gasoline ³	.0	.0	.0	.0	.3	.0	.2	.2	.1	.3	.0	.0	.2	.2
Liquefied Refinery Gases	4.1	.5	3.9	1.9	3.2	2.7	2.6	3.0	3.3	2.1	1.3	3.1	2.7	2.7
Naphtha-Type Jet Fuel	2.1	2.2	2.1	2.2	1.0	1.0	1.9	1.2	2.0	.9	3.4	19.3	2.2	2.1
Kerosene-Type Jet Fuel	2.1	0	1.9	7.8	6.1	4.9	3.6	5.4	7.2	11.4	.1	1.9	8.1	7.4
Kerosene	1.2	3.2	1.3	0	.4	.1	.2	.3	1.8	2.5	.2	.9	1.8	1.1
Distillate Fuel Oil	20.5	26.2	20.8	14.5	17.3	22.0	24.2	19.4	18.1	15.3	28.1	30.1	18.0	18.2
Residual Fuel Oil	10.6	6.3	10.4	2.5	2.7	2.6	1.9	2.5	6.4	6.6	6.8	3.5	6.3	7.6
Naphtha < 400 Deg. F. Petro. Feed. Use	1.2	0	1.1	0	.5	.0	.4	.4	3.5	.8	.3	0	2.5	1.4
Other Oils > 400 Deg. F. Petro. Feed. Use	.0	0	.0	0	.4	0	.0	.2	5.2	7.7	.5	0	5.4	1.0
Special Naphthas	.0	1.3	.1	0	.6	0	.8	.6	1.1	1.2	5.9	0	.7	.5
Lubricants	1.1	14.1	1.9	0	.8	0	1.6	.9	1.6	.0	2.9	0	1.4	1.2
Wax	.1	3.5	.3	0	.0	.0	.2	.1	.1	.1	1.3	0	.1	.1
Petroleum Coke	3.7	.8	3.5	1.6	3.9	4.4	3.7	3.9	3.0	3.3	1.3	.3	2.9	3.5
Asphalt and Road Oil	4.7	2.2	4.6	6.9	3.1	7.7	2.6	3.5	5.5	1.6	18.5	3.4	1.8	2.5
Still Gas	4.9	3.7	4.8	4.0	4.0	3.6	4.4	4.1	5.2	3.8	3.8	2.0	4.4	4.5
Miscellaneous Products	1.0	.6	1.0	.1	.1	.4	.4	.2	.5	.5	.9	0	.5	.4
Processing Gain(-) or Loss(+) ⁴	-5.7	2.5	-5.2	-4.6	-3.9	-4.6	-3.9	-4.0	-4.1	-3.5	-1.1	-1.5	-3.5	-4.0

¹ Based on crude oil input and net reruns of unfinished oils.² Based on total finished motor gasoline output plus net output of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and alcohol.³ Based on finished aviation gasoline output plus net output of aviation gasoline blending components.⁴ Represents the difference between Input and Production.

Note: Totals may not equal sum of components due to independent rounding.

Note: See Explanatory Note on negative production.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 16. Imports of Crude Oil and Petroleum Products by PAD District, March 1983
(Thousands of Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) ^{1 2}	17,991	11,252	36,051	827	3,068	69,189
Natural Gas Liquids						
Natural Gasoline and Isopentane	321	3,717	347	490	415	5,291
Plant Condensate	(s)	0	0	0	0	(s)
Liquefied Petroleum Gases	57	0	0	78	0	134
Ethane	264	3,717	347	412	415	5,156
Propane	0	1,959	0	0	0	1,959
Butane	242	965	0	243	57	1,507
Butane-Propane Mixtures	23	793	0	169	358	1,343
Ethane-Propane Mixtures	0	0	347	0	0	347
Other Liquids ¹						
Unfinished Oils ¹	2,660	632	2,598	59	5	5,955
Motor Gasoline Blending Components	2,114	539	2,135	0	5	4,793
Aviation Gasoline Blending Components	545	94	463	59	0	1,161
Other	0	0	0	0	0	0
Finished Petroleum Products	26,567	1,141	2,304	(s)	2,066	32,079
Finished Motor Gasoline	4,938	149	174	0	1,099	6,360
Finished Leaded Motor Gasoline	2,863	149	174	0	891	4,077
Finished Unleaded Motor Gasoline	2,075	0	0	0	208	2,283
Finished Aviation Gasoline	(s)	0	0	0	0	(s)
Naphtha-Type Jet Fuel	0	0	0	0	0	0
Kerosene-Type Jet Fuel	997	0	0	0	100	1,097
Bonded Aircraft Fuel	0	0	0	0	0	0
Other	997	0	0	0	(s)	1,097
Kerosene	81	0	0	0	81	162
Distillate Fuel Oil	1,055	151	5	0	98	1,310
Bonded Ships Bunkers	0	0	0	0	0	0
Other	1,055	151	5	0	98	1,310
Residual Fuel Oil	19,300	698	677	0	598	21,273
Bonded Ships Bunkers	0	0	0	0	0	0
Other	19,300	698	677	0	598	21,273
Naphtha < 400 Deg. for Petro. Feed. Use	7	23	580	0	1	611
Other Oils > 400 Deg. for Petro. Feed. Use	0	4	0	0	0	4
Special Naphthas	21	94	332	(s)	15	462
Lubricants	95	7	49	0	134	285
Wax	4	2	2	0	7	14
Asphalt and Road Oil	68	6	0	0	7	81
Miscellaneous Products	2	7	485	(s)	8	502
Total imports	47,539	16,743	41,301	1,376	5,554	112,513

¹ Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, March 1983
(Thousands of Barrels)

Source	Crude Oil 1	LPG	Unfin- ished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Kero- sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod- ucts 2	Total Prod- ucts	Total Petro- leum	Total (Daily Average)
All PAD Districts														
Arab OPEC														
Algeria	944	0	0	0	0	0	0	0	1,014	0	2	1,016	1,959	63
Kuwait	0	0	525	0	0	0	0	0	0	0	0	525	525	17
Saudi Arabia	3,198	0	0	0	0	0	0	0	0	0	(s)	(s)	3,198	103
Subtotal Arab OPEC	4,142	0	525	0	0	0	0	0	1,014	0	2	1,541	5,682	183
Other OPEC														
Ecuador	2,939	0	0	0	0	0	0	0	119	0	0	119	3,058	99
Gabon	1,778	0	0	0	0	0	0	0	0	0	0	0	1,778	57
Indonesia	4,164	0	0	0	85	8	0	0	8	0	0	100	4,264	138
Nigeria	3,756	0	0	0	0	0	0	0	0	0	0	0	3,756	121
Venezuela	3,568	0	348	1,008	0	482	0	0	7,287	0	483	9,608	13,175	425
Subtotal Other OPEC	16,205	0	348	1,008	85	490	0	0	7,413	0	483	9,827	26,031	840
Other														
Angola	2,063	0	0	0	0	0	0	0	0	0	0	0	2,063	67
Australia	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Bahamas	0	0	903	0	0	425	0	0	909	0	422	2,659	2,659	86
Bolivia	328	0	0	0	0	0	0	0	0	0	0	0	328	11
Brazil	0	0	0	0	0	0	0	0	1,328	0	130	1,458	1,458	47
Canada	7,647	4,809	233	153	369	0	15	360	1,167	125	237	7,468	15,116	487
Congo	847	0	0	0	0	0	0	0	201	0	0	201	1,048	34
Egypt	463	0	21	0	0	0	0	0	0	0	0	21	484	16
France	0	0	0	0	0	0	0	(s)	0	9	(s)	9	9	(s)
Mexico	23,038	347	0	0	(s)	0	0	21	129	1	15	514	23,551	760
Netherlands	0	(s)	0	0	1,164	0	0	0	0	54	0	1,218	1,218	39
Netherlands Antilles	0	0	821	0	0	0	0	0	4,692	207	89	5,810	5,810	187
Norway	868	0	0	0	0	0	0	0	0	0	0	0	868	28
People's Republic of China	0	0	0	0	1,003	0	0	0	5	0	0	1,008	1,008	33
Peru	0	0	218	0	18	0	0	0	0	0	0	236	236	8
Puerto Rico	0	0	301	0	802	0	0	54	0	0	162	1,320	1,320	43
Romania	0	0	0	0	823	0	0	0	0	0	0	823	823	27
Spain	0	0	236	0	0	0	0	0	0	0	0	236	236	8
Trinidad and Tobago	2,405	0	0	0	0	0	0	0	0	0	0	0	2,405	78
Tunisia	535	0	0	0	0	0	0	0	0	0	0	0	535	17
United Kingdom	7,189	(s)	0	0	20	0	0	0	245	0	(s)	265	7,455	240
Virgin Islands	0	0	771	0	818	90	66	792	2,491	0	0	5,029	5,029	162
Zaire	770	0	0	0	0	0	0	0	0	0	0	0	770	25
Other Western Hemisphere	145	0	0	0	0	0	0	0	1,046	14	0	1,061	1,205	39
Other Eastern Hemisphere	2,545	0	416	0	1,258	92	0	82	631	52	90	2,622	5,166	167
Subtotal Other	48,842	5,156	3,921	153	6,275	607	81	1,310	12,846	462	1,146	31,957	80,799	2,606
Total Imports	69,189	5,156	4,793	1,161	6,360	1,097	81	1,310	21,273	462	1,631	43,324	112,513	3,629

See footnotes at end of table.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, March 1983
(Thousands of Barrels)
(continued)

Source	Crude Oil 1	LPG	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
PAD District I														
Arab OPEC														
Algeria	2	0	0	0	0	0	0	0	667	0	0	667	670	22
Kuwait	0	0	525	0	0	0	0	0	0	0	0	525	525	17
Saudi Arabia	1,994	0	0	0	0	0	0	0	0	0	(s)	(s)	1,994	64
Subtotal Arab OPEC	1,996	0	525	0	0	0	0	0	667	0	(s)	1,192	3,189	103
Other OPEC														
Ecuador	324	0	0	0	0	0	0	0	119	0	0	119	442	14
Gabon	1,133	0	0	0	0	0	0	0	0	0	0	0	1,133	37
Indonesia	1,088	0	0	0	0	0	0	0	0	0	0	0	1,088	35
Nigeria	210	0	0	0	0	0	0	0	0	0	0	0	210	7
Venezuela	2,256	0	0	545	0	482	0	0	7,084	0	0	8,111	10,367	334
Subtotal Other OPEC	5,011	0	0	545	0	482	0	0	7,203	0	0	8,230	13,241	427
Other														
Angola	1,795	0	0	0	0	0	0	0	0	0	0	0	1,795	58
Bahamas	0	0	0	0	0	425	0	0	909	0	0	1,334	1,334	4
Brazil	0	0	0	0	0	0	0	0	1,328	0	0	1,328	1,328	45
Canada	0	264	0	0	125	0	15	209	470	16	73	1,172	1,172	38
Congo	0	0	0	0	0	0	0	0	201	0	0	201	201	6
Egypt	1	0	21	0	0	0	0	0	0	0	0	21	22	1
France	0	0	0	0	0	0	0	(s)	0	0	(s)	(s)	(s)	(s)
Mexico	2,759	0	0	0	0	0	0	0	0	0	0	0	2,759	89
Netherlands	0	(s)	0	0	1,164	0	0	0	4,355	0	0	1,164	1,164	38
Netherlands Antilles	0	0	821	0	0	0	0	0	0	0	68	5,244	5,244	169
Norway	501	0	301	0	0	0	0	0	0	0	0	0	501	16
Puerto Rico	0	0	0	0	802	0	0	54	0	0	91	1,248	1,248	27
Romania	0	0	0	0	823	0	0	0	0	0	0	823	823	27
Trinidad and Tobago	676	0	0	0	0	0	0	0	0	0	0	0	676	22
Tunisia	535	0	0	0	0	0	0	0	0	0	0	0	535	17
United Kingdom	3,947	(s)	0	0	20	0	0	0	245	0	(s)	265	4,212	136
Virgin Islands	0	0	446	0	818	90	66	792	2,491	0	0	4,703	4,703	152
Zaire	770	0	0	0	0	0	0	0	0	0	0	0	770	25
Other Western Hemisphere														
Hemisphere	0	0	0	0	0	0	0	0	1,046	0	0	1,046	1,046	34
Other Eastern Hemisphere	0	0	0	0	1,186	0	0	0	384	5	(s)	1,575	1,575	51
Subtotal Other	10,984	264	1,589	0	4,938	515	81	1,055	11,430	21	232	20,125	31,109	1,004
Total Imports	17,991	264	2,114	545	4,938	997	81	1,055	19,300	21	232	29,548	47,539	1,534
PAD District II														
Arab OPEC														
Algeria	111	0	0	0	0	0	0	0	0	0	0	0	111	4
Subtotal Arab OPEC	111	0	0	0	0	0	0	0	0	0	0	0	111	4

See footnotes at end of table.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, March 1983

(continued)

Source	Crude Oil 1	LPG	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
PAD District II														
Other OPEC														
Ecuador	240	0	0	0	0	0	0	0	0	0	0	0	240	8
Venezuela	0	0	348	0	0	0	0	0	0	0	0	348	348	11
Subtotal Other OPEC	240	0	348	0	0	0	0	0	0	0	0	348	588	19
Other														
Canada	6,124	3,717	191	94	149	0	0	151	698	94	50	5,143	11,268	363
Congo	525	0	0	0	0	0	0	0	0	0	0	0	525	17
France	0	0	0	0	0	0	0	0	0	0	(s)	0	(s)	(s)
Mexico	2,505	0	0	0	0	0	0	0	0	0	0	0	2,505	81
United Kingdom	1,395	0	0	0	0	0	0	0	0	0	0	0	1,395	45
Other Western Hemisphere	145	0	0	0	0	0	0	0	0	0	0	0	145	5
Other Eastern Hemisphere	207	0	0	0	0	0	0	0	0	0	0	0	207	7
Subtotal Other	10,900	3,717	191	94	149	0	0	151	698	94	50	5,143	16,044	517
Total Imports	11,252	3,717	539	94	149	0	0	151	698	94	50	5,491	16,743	540
PAD District III														
Arab OPEC														
Algeria	830	0	0	0	0	0	0	0	346	0	2	348	1,178	38
Saudi Arabia	1,204	0	0	0	0	0	0	0	0	0	0	0	1,204	39
Subtotal Arab OPEC	2,034	0	0	0	0	0	0	0	346	0	2	348	2,382	77
Other OPEC														
Ecuador	2,375	0	0	0	0	0	0	0	0	0	0	0	2,375	77
Gabon	645	0	0	0	0	0	0	0	0	0	0	0	645	21
Indonesia	849	0	0	0	0	0	0	0	0	0	0	0	849	27
Nigeria	3,546	0	0	0	0	0	0	0	0	0	0	0	3,546	114
Venezuela	1,166	0	0	0	0	0	0	0	203	0	483	1,149	2,315	75
Subtotal Other OPEC	8,582	0	0	463	0	0	0	0	203	0	483	1,149	9,731	314
Other														
Angola	268	0	0	0	0	0	0	0	0	0	0	0	268	9
Bahamas	0	0	903	0	0	0	0	0	0	0	422	1,325	1,325	43
Bolivia	328	0	0	0	0	0	0	0	0	0	0	0	328	11
Brazil	0	0	0	0	0	0	0	0	0	0	130	130	130	4
Canada	0	0	37	0	0	0	0	0	0	0	28	65	65	2
Congo	322	0	0	0	0	0	0	0	0	0	0	0	322	10
Egypt	462	0	0	0	0	0	0	0	0	0	0	0	462	15
France	0	0	0	0	0	0	0	0	0	0	(s)	9	9	(s)
Mexico	17,774	347	0	0	(s)	0	0	0	129	1	2	484	18,258	589
Netherlands	0	0	0	0	0	0	0	0	0	54	0	54	54	2
Netherlands Antilles	0	0	0	0	0	0	0	0	0	207	0	207	207	7
Norway	367	0	0	0	0	0	0	0	0	0	0	0	367	12
People's Republic of China	0	0	0	0	174	0	0	0	0	0	0	174	174	6
Peru	0	0	0	0	0	0	0	0	0	0	0	218	218	7
Spain	0	0	218	0	0	0	0	0	0	0	0	236	236	8

See footnotes at end of table.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, March 1983
(Thousands of Barrels)
(continued)

Source	Crude Oil 1	LPG	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
PAD District III														
Other														
Trinidad and Tobago	1,729	0	0	0	0	0	0	0	0	0	0	0	1,729	56
United Kingdom	1,848	0	0	0	0	0	0	0	0	0	0	0	1,848	60
Virgin Islands	0	0	326	0	0	0	0	0	0	0	0	326	326	11
Other Western Hemisphere	0	0	0	0	0	0	0	0	0	14	0	14	14	(s)
Other Eastern Hemisphere	2,338	0	416	0	0	0	0	0	0	47	49	512	2,849	92
Subtotal Other	25,435	347	2,135	0	174	0	0	5	129	332	630	3,753	29,188	942
Total Imports	36,051	347	2,135	463	174	0	0	5	677	332	1,116	5,250	41,301	1,332
PAD District IV														
Other														
Canada	827	412	0	59	0	0	0	0	0	(s)	78	549	1,376	44
Subtotal Other	827	412	0	59	0	0	0	0	0	(s)	78	549	1,376	44
Total Imports	827	412	0	59	0	0	0	0	0	(s)	78	549	1,376	44
PAD District V														
Other OPEC														
Indonesia	2,226	0	0	0	85	8	0	0	8	0	0	100	2,327	75
Venezuela	145	0	0	0	0	0	0	0	0	0	0	0	145	5
Subtotal Other OPEC	2,372	0	0	0	85	8	0	0	8	0	0	100	2,472	80
Other														
Australia	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Canada	696	415	5	0	95	0	(s)	0	0	15	8	538	1,234	40
Mexico	0	0	0	0	0	0	0	16	0	0	14	30	30	1
Netherlands	0	(s)	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)
Netherlands Antilles	0	0	0	0	0	0	0	0	337	0	22	359	359	12
People's Republic of China	0	0	0	0	829	0	0	0	5	0	0	834	834	27
Peru	0	0	0	0	18	0	0	0	0	0	0	18	18	1
Puerto Rico	0	0	0	0	0	0	0	0	0	0	71	71	71	2
Other Eastern Hemisphere	0	0	0	0	72	92	0	0	248	(s)	41	535	535	17
Subtotal Other	696	415	5	0	1,015	92	(s)	98	590	15	155	2,386	3,082	99
Total Imports	3,068	415	5	0	1,099	100	(s)	98	598	15	155	2,486	5,554	179

1 Includes crude oil imported for storage in the Strategic Petroleum Reserve.

2 Includes aviation gasoline, waxes, asphalt, lubricants, natural gasoline, isopentane, plant condensate, naphthas less than 400 degrees F, other oils greater than 400 degrees F and miscellaneous products.

(s) Less than 500 barrels or less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 18. Exports of Crude Oil and Petroleum Products by PAD District, March 1983
(Thousands of Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) ¹	0	1,420	0	0	3,959	5,379
Liquefied Petroleum Gases	87	1,401	2,326	0	121	3,936
Ethane	(s)	(s)	0	0	0	0
Propane	61	566	1,759	0	49	2,435
Butane	26	835	567	0	73	1,501
Butane-Propane Mixtures	0	0	0	0	0	0
Finished Motor Gasoline	1	15	31	0	678	726
Naphtha-Type Jet Fuel	1	0	0	0	0	1
Kerosene-Type Jet Fuel	(s)	0	0	0	27	27
Kerosene	2	(s)	(s)	0	(s)	2
Distillate Fuel Oil	3	0	591	0	1,239	1,832
Residual Fuel Oil	198	0	2,339	0	2,703	5,241
Naphtha < 400 Deg. for Petrochem. Feedstock	102	6	18	(s)	5	131
Other Oils > 400 Deg. for Petrochem. Feedstock	3	25	186	0	1	215
Special Naphthas	3	2	30	0	1	37
Lubricants	146	12	196	1	56	411
Wax	5	1	11	0	4	21
Petroleum Coke	313	127	3,530	0	2,846	6,816
Asphalt	2	2	2	1	11	17
Miscellaneous Products	14	2	12	(s)	4	32
Total Product Exports	880	1,594	9,273	2	7,697	19,445
Total Exports	880	3,013	9,273	2	11,656	24,824

¹ Exports of crude oil are prohibited by law. However, some crude oil is exchanged with

Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories

(especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical

Tracking Systems count these exchanges and shipments as imports and exports.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 19. Exports of Crude Oil and Petroleum Products by Destination, March 1983
(Thousands of Barrels)

Destination	Crude Oil 1	LPG	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubricants	Wax	Petroleum Coke	Asphalt	Other	Total	Total (Daily Average)
Argentina	0	0	0	0	0	0	0	(s)	(s)	0	0	(s)	1	(s)
Australia	0	2	438	0	0	0	4	6	(s)	0	(s)	1	452	15
Bahamas	0	1	1	(s)	149	0	0	2	0	0	0	(s)	153	5
Bahrain	0	0	0	0	0	0	0	(s)	0	0	(s)	0	(s)	(s)
Belgium & Luxembourg	0	0	0	0	0	0	(s)	1	(s)	654	(s)	(s)	655	21
Brazil	0	(s)	0	0	0	0	8	1	0	0	0	(s)	9	(s)
Cameroon	0	0	0	0	0	0	0	(s)	(s)	0	0	0	(s)	(s)
Canada	1,420	1,401	25	0	0	70	4	48	3	230	14	59	3,274	106
Chile	0	0	0	0	0	0	1	1	(s)	(s)	0	1	3	(s)
China (Taiwan)	0	1	0	0	0	(s)	4	10	(s)	0	(s)	3	18	1
Colombia	0	4	0	0	3	0	(s)	15	(s)	0	0	1	24	1
Costa Rica	0	0	0	0	0	0	(s)	4	(s)	0	0	1	5	(s)
Cuba	0	0	0	0	0	0	0	(s)	(s)	0	0	0	1	(s)
Denmark	0	(s)	0	0	0	0	0	(s)	(s)	0	0	(s)	24	1
Dominican Republic	0	24	0	0	0	0	0	(s)	(s)	0	0	0	106	3
Ecuador	0	104	0	0	0	0	0	(s)	(s)	61	(s)	1	62	2
Egypt	0	0	0	0	0	0	0	1	0	0	0	0	2	(s)
El Salvador	0	0	0	0	0	0	0	2	0	0	0	0	1	(s)
Finland	0	0	0	0	0	0	0	(s)	2	0	0	0	1,226	40
France	0	229	0	0	0	386	(s)	1	2	569	0	39	28	1
French Pacific Isl.	0	0	0	0	28	0	0	(s)	0	0	0	0	11	(s)
Ghana	0	0	0	0	0	0	0	(s)	0	11	0	0	3	(s)
Greece	0	3	0	0	0	0	0	(s)	0	0	0	0	37	1
Guatemala	0	36	0	0	0	0	0	1	0	0	0	0	1	(s)
Guinea	0	0	0	0	0	0	0	3	(s)	0	0	1	4	(s)
Honduras	0	0	0	0	0	0	0	1	(s)	0	0	0	1	(s)
Hong Kong	0	2	0	0	0	490	0	1	(s)	0	0	0	493	16
India	0	(s)	0	0	68	0	0	(s)	(s)	84	(s)	10	79	3
Indonesia	0	0	0	0	0	0	1	30	(s)	0	0	0	115	4
Iran	0	0	0	0	0	0	0	(s)	(s)	0	0	0	(s)	(s)
Israel	0	0	0	0	0	0	0	(s)	(s)	1	0	100	839	27
Italy	0	26	0	0	0	0	0	(s)	0	712	0	0	(s)	(s)
Ivory Coast	0	0	0	0	0	0	0	(s)	0	0	(s)	0	(s)	1
Jamaica	0	16	0	0	0	0	7	11	(s)	0	(s)	1	34	1
Japan	0	1,037	0	0	526	3	6	40	(s)	2	(s)	6	3,298	106
Jordan	0	0	0	0	0	0	0	(s)	0	0	0	1	1	(s)
Korea, Republic of	0	2	0	0	0	0	0	2	(s)	152	0	2	157	5
Kuwait	0	0	0	0	0	0	0	3	0	0	0	(s)	3	(s)
Lebanon	0	0	0	0	0	0	0	2	0	0	0	(s)	2	(s)
Liberia	0	0	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
Malaysia	0	0	0	0	0	0	0	1	(s)	0	0	2	2	(s)
Mexico	0	654	5	27	0	0	2	37	7	64	0	2	797	26
Netherlands	0	331	225	0	275	65	(s)	53	(s)	1,198	0	100	2,023	65
Netherlands Antilles	0	1	0	0	0	578	0	1	0	0	0	0	804	26
New Zealand	0	0	0	0	0	0	0	2	0	0	0	(s)	1	(s)
Nicaragua	0	0	0	0	0	0	0	(s)	0	0	0	(s)	2	(s)
Nigeria	0	0	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
Norway	0	0	0	0	0	0	0	(s)	0	28	(s)	1	28	1
Pacific Trust Terr.	0	0	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
Panama	0	0	0	0	184	251	(s)	2	(s)	0	0	0	437	14
Peru	0	13	0	0	(s)	0	(s)	27	(s)	0	0	1	42	1
Philippines	0	0	0	0	0	0	(s)	6	(s)	(s)	0	3	9	(s)
Puerto Rico	1,779	32	(s)	0	0	138	(s)	18	(s)	2	0	10	1,979	64
Rep. of South Africa	0	1	0	0	0	0	0	12	(s)	0	1	4	17	1

See footnotes at end of table.

Table 19. Exports of Crude Oil and Petroleum Products by Destination, March 1983
(Thousands of Barrels)

Destination	Crude Oil 1	LPG	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubri-cants	Wax	Petro-leum Coke	Asphalt	Other	Total	Total (Daily Average)
Saudi Arabia	0	2	0	1	0	0	(s)	17	0	1	0	5	26	1
Singapore	0	1	0	0	428	2,138	(s)	2	(s)	0	(s)	3	2,572	83
Spain	0	(s)	0	0	0	0	(s)	1	(s)	984	0	2	988	32
Surinam	0	0	0	0	0	0	0	0	0	10	0	0	10	(s)
Sweden	0	0	0	0	0	0	0	1	(s)	0	0	1	2	(s)
Switzerland	0	1	0	0	0	(s)	0	1	(s)	0	0	1	3	(s)
Thailand	0	0	31	0	0	0	0	2	(s)	0	0	1	34	1
Trinidad and Tobago	0	0	0	0	0	0	0	3	0	0	0	(s)	3	(s)
Turkey	0	0	0	0	0	245	0	0	0	0	0	0	245	8
United Arab Emirates	0	(s)	0	0	0	0	0	5	0	58	0	(s)	64	2
United Kingdom	0	2	0	0	1	0	(s)	11	1	36	0	2	53	2
U.S.S.R.	0	0	0	0	0	0	0	0	0	0	0	7	7	(s)
Uruguay	0	0	0	0	0	0	0	1	0	0	0	(s)	1	(s)
Venezuela	0	(s)	0	(s)	0	0	(s)	1	(s)	56	1	1	59	2
Virgin Islands	1,707	(s)	0	0	0	339	0	0	0	0	0	0	2,046	66
West Germany	0	2	(s)	0	(s)	0	0	1	1	203	0	1	209	7
Yugoslavia	0	0	0	0	0	0	0	0	0	27	0	0	27	1
Other	473	7	0	0	171	537	(s)	19	(s)	0	(s)	4	1,212	39
Total	5,379	3,936	726	28	1,832	5,241	37	411	21	6,816	17	380	24,824	801

1 Exports of crude oil are prohibited by law. However, some crude oil is exchanged with Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical

Tracking Systems count these exchanges and shipments as imports and exports.

(s) Less than 500 barrels or less than 500 barrels per day.

Note: Total may not equal sum of components due to independent rounding.

Source: See Explanatory Notes on Data Collection and Estimation.

56 Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, March 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mtn.		Dist. V West Coast
Crude Oil (incl. lease condensate)																	
Refinery	—	—	14,106	—	—	—	—	14,710	—	—	—	—	—	45,589	2,380	24,255	101,040
Tank Farms and Pipelines	—	—	1,744	—	—	—	—	66,412	—	—	—	—	—	94,584	12,342	29,730	204,812
Leases	—	—	61	—	—	—	—	1,778	—	—	—	—	—	17,397	1,432	1,774	22,442
Strategic Petroleum Reserve ¹	—	—	0	—	—	—	—	0	—	—	—	—	—	311,830	0	0	311,830
Alaskan In-Transit	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	30,296	30,296
Total	—	—	15,911	—	—	—	—	82,900	—	—	—	—	—	469,400	16,154	86,055	670,420
Total Stocks, All Oils (excl. Crude Oil)																	
Refinery	33,058	3,098	36,156	901	42,865	8,005	18,179	69,950	9,656	74,751	45,221	4,678	1,500	135,806	15,179	66,432	323,523
Bulk Terminal	—	—	93,286	—	—	—	—	84,441	—	—	—	—	—	67,391	2,194	20,532	267,844
Pipeline	—	—	26,882	—	—	—	—	34,041	—	—	—	—	—	39,453	2,999	3,992	107,167
Natural Gas Processing Plant	108	32	140	0	189	53	845	1,087	2,295	1,730	726	60	170	4,981	194	90	6,492
Total	—	—	156,264	—	—	—	—	189,519	—	—	—	—	—	247,631	20,566	91,046	705,026
Natural Gasoline and Isopentane																	
Refinery	18	0	18	0	14	108	134	256	134	262	156	0	16	568	3	20	865
Bulk Terminal	—	—	7	—	—	—	—	1,722	—	—	—	—	—	1,523	2	10	3,264
Pipeline	—	—	0	—	—	—	—	338	—	—	—	—	—	797	139	5	1,279
Natural Gas Processing Plant	5	5	10	0	13	14	111	138	356	182	187	15	17	757	30	25	960
Total	—	—	35	—	—	—	—	2,454	—	—	—	—	—	3,645	174	60	6,368
Unfractionated Stream																	
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulk Terminal	—	—	0	—	—	—	—	956	—	—	—	—	—	909	0	0	1,865
Pipeline	—	—	0	—	—	—	—	325	—	—	—	—	—	1,417	369	0	2,111
Natural Gas Processing Plant	0	0	0	0	98	2	318	418	150	1,364	80	3	13	1,610	24	3	2,055
Total	—	—	0	—	—	—	—	1,699	—	—	—	—	—	3,936	393	3	6,031
Plant Condensate																	
Refinery	0	0	0	0	8	0	0	8	6	70	0	85	0	161	0	0	169
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	1,042	0	0	1,042
Natural Gas Processing Plant	0	0	0	0	3	4	5	12	28	15	15	3	0	61	14	0	87
Total	—	—	0	—	—	—	—	20	—	—	—	—	—	1,264	14	0	1,298
Liquefied Petroleum Gases																	
Refinery	412	8	420	107	1,156	129	481	1,873	172	2,661	1,877	16	22	4,748	342	907	8,290
Bulk Terminal	—	—	1,026	—	—	—	—	19,467	—	—	—	—	—	37,965	30	516	59,004
Pipeline	—	—	2,525	—	—	—	—	6,263	—	—	—	—	—	3,574	40	0	12,402
Natural Gas Processing Plant	90	27	117	0	74	33	411	518	1,518	167	444	37	140	2,306	110	62	3,113
Total	—	—	4,088	—	—	—	—	28,121	—	—	—	—	—	48,593	522	1,485	82,809
Ethane																	
Refinery	0	0	0	0	7	0	0	7	0	724	0	0	0	724	5	0	736
Bulk Terminal	—	—	0	—	—	—	—	875	—	—	—	—	—	2,138	0	0	3,013
Pipeline	—	—	0	—	—	—	—	1,247	—	—	—	—	—	277	0	0	1,524

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, March 1983
(Thousands of Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		
Ethane																
Natural Gas Processing Plant	0	0	0	0	24	0	19	43	0	1	0	0	0	1	1	
Total	--	--	0	--	--	--	--	2,172	--	--	--	--	--	3,140	6	
Propane for Petrochemical Feedstock Use																
Refinery	21	0	21	0	136	0	0	136	1	6	80	0	0	87	0	
Bulk Terminal	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	
Pipeline	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	--	--	21	--	--	--	--	136	--	--	--	--	--	87	0	
Propane For Other Uses																
Refinery	333	5	338	2	673	25	195	895	24	705	841	5	1	1,576	121	
Bulk Terminal	--	--	954	--	--	--	--	11,370	--	--	--	--	--	16,876	30	
Pipeline	--	--	2,434	--	--	--	--	3,011	--	--	--	--	--	1,506	5	
Natural Gas Processing Plant	34	27	61	0	37	23	158	218	819	33	338	15	78	1,283	79	
Total	--	--	3,787	--	--	--	--	15,494	--	--	--	--	--	21,241	235	
Butane For Petro. Feed Use																
Refinery	0	0	0	0	0	12	0	12	0	13	0	1	0	14	0	
Bulk Terminal	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	
Pipeline	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	--	--	0	--	--	--	--	12	--	--	--	--	--	14	0	
Butane For Other Uses																
Refinery	58	0	58	66	226	76	162	530	66	720	508	3	10	1,307	164	
Bulk Terminal	--	--	72	--	--	--	--	2,017	--	--	--	--	--	7,585	0	
Pipeline	--	--	91	--	--	--	--	1,026	--	--	--	--	--	343	0	
Natural Gas Processing Plant	55	0	55	0	9	9	117	135	275	72	74	16	18	455	25	
Total	--	--	276	--	--	--	--	3,708	--	--	--	--	--	9,690	189	
Butane-Propane Mixtures For Petro. Feed Use																
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	
Butane-Propane Mixtures For Other Uses																
Refinery	0	0	0	0	2	0	0	2	2	11	7	0	5	25	6	
Bulk Terminal	--	--	0	--	--	--	--	211	--	--	--	--	--	42	0	
Pipeline	--	--	0	--	--	--	--	15	--	--	--	--	--	644	0	
Natural Gas Processing Plant	0	0	0	0	0	0	1	1	3	4	0	1	0	8	4	
Total	--	--	0	--	--	--	--	229	--	--	--	--	--	719	10	
Ethane-Propane Mixtures																
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bulk Terminal	--	--	0	--	--	--	--	3,664	--	--	--	--	--	7,785	0	
Pipeline	--	--	0	--	--	--	--	570	--	--	--	--	--	548	35	
Natural Gas Processing Plant	0	0	0	0	0	0	100	100	344	0	0	0	39	383	0	
Total	--	--	0	--	--	--	--	4,334	--	--	--	--	--	8,716	35	

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, March 1983
(Thousands of Barrels) (continued)

Commodity	PAD District I				PAD District II				PAD District III					PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky		PAD Dist. V
															Mt.		West Coast
Isobutane																	
Refinery	0	3	3	39	112	16	124	291	79	482	441	7	6	1,015	46	32	1,387
Bulk Terminal	--	--	0	--	--	--	--	1,330	--	--	--	--	--	3,539	0	92	4,961
Pipeline	--	--	0	--	--	--	--	394	--	--	--	--	--	256	0	0	650
Natural Gas Processing Plant	1	0	1	0	4	1	16	21	77	57	32	5	5	176	1	3	202
Total	--	--	4	--	--	--	--	2,036	--	--	--	--	--	4,986	47	127	7,200
Other Hydrocarbons and Alcohol																	
Refinery	50	0	50	0	112	0	0	112	1	88	27	0	0	116	0	6	284
Total	--	--	50	--	--	--	--	112	--	--	--	--	--	116	0	6	284
Unfinished Oils																	
Refinery	2,958	261	3,219	58	2,935	99	1,575	4,667	804	8,211	5,929	150	99	15,193	496	4,876	28,451
Naphtha and Lighter	1,942	17	1,959	0	2,444	11	349	2,804	733	7,471	1,161	39	3	9,407	397	3,902	18,469
Kerosene and Lighter Gas Oils	5,629	373	6,002	66	4,152	283	1,381	5,882	724	10,190	7,029	300	90	18,333	994	12,691	43,902
Heavy Gas Oils	1,701	250	1,951	1	3,182	10	1,395	4,588	371	3,836	2,658	26	0	6,891	887	6,123	20,440
Residuum	12,230	901	13,131	125	12,713	403	4,700	17,941	2,632	29,708	16,777	515	192	49,824	2,774	27,592	111,262
Total	3,749	120	3,869	33	5,839	1,093	2,031	8,996	1,300	8,110	5,384	109	174	15,077	2,736	7,252	37,930
Motor Gasoline Blending Components																	
Refinery	--	--	136	--	--	--	--	60	--	--	--	--	--	1,848	0	43	2,087
Bulk Terminal	--	--	0	--	--	--	--	251	--	--	--	--	--	78	0	0	329
Pipeline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Natural Gas Processing Plant	--	--	4,005	--	--	--	--	9,307	--	--	--	--	--	17,003	2,736	7,295	40,346
Total	--	--	4,005	--	--	--	--	9,307	--	--	--	--	--	17,003	2,736	7,295	40,346
Aviation Gasoline Blending Components																	
Refinery	5	0	5	0	108	0	13	121	64	62	174	0	0	300	0	46	472
Bulk Terminal	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	0	0
Pipeline	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	--	--	5	--	--	--	--	121	--	--	--	--	--	300	0	46	472
Total Finished Motor Gasoline																	
Refinery	4,646	171	4,817	117	6,449	1,825	3,493	11,884	2,115	9,063	5,903	740	168	17,989	2,849	7,627	45,166
Bulk Terminal	--	--	32,511	--	--	--	--	30,807	--	--	--	--	--	12,171	1,279	8,778	85,546
Pipeline	--	--	14,070	--	--	--	--	16,274	--	--	--	--	--	19,090	1,466	2,066	52,966
Natural Gas Processing Plant	13	0	13	0	0	0	0	0	0	0	0	0	0	0	15	0	28
Total	--	--	51,411	--	--	--	--	58,965	--	--	--	--	--	49,250	5,609	18,471	183,706
Finished Leaded Motor Gasoline																	
Refinery	1,818	113	1,931	53	2,915	1,080	2,045	6,093	1,228	4,400	2,774	386	91	8,879	1,831	3,177	21,911
Bulk Terminal	--	--	14,488	--	--	--	--	15,210	--	--	--	--	--	6,020	823	4,356	40,897
Pipeline	--	--	8,295	--	--	--	--	9,080	--	--	--	--	--	9,327	930	834	28,466
Natural Gas Processing Plant	10	0	10	0	0	0	0	0	0	0	0	0	0	0	8	0	18
Total	--	--	24,724	--	--	--	--	30,383	--	--	--	--	--	24,226	3,592	8,367	91,292

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, March 1983
(Thousands of Barrels) (continued)

Commodity	PAD District I				PAD District II				PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Rocky Mtn.	Dist. V West Coast
Finished Unleaded Motor Gasoline																	
Refinery	2,828	58	2,886	64	3,534	745	1,448	5,791	887	4,663	3,129	354	77	9,110	1,018	4,450	23,255
Bulk Terminal	--	--	18,023	--	--	--	--	15,597	--	--	--	--	--	6,151	456	4,422	44,649
Pipeline	--	--	5,775	--	--	--	--	7,194	--	--	--	--	--	9,763	536	1,232	24,500
Natural Gas Processing Plant	3	0	3	0	0	0	0	0	0	0	0	0	0	0	7	0	10
Total	--	--	26,687	--	--	--	--	28,582	--	--	--	--	--	25,024	2,017	10,104	92,414
Finished Aviation Gasoline																	
Refinery	25	0	25	0	225	0	26	251	18	325	119	0	0	462	40	158	936
Bulk Terminal	--	--	433	--	--	--	--	384	--	--	--	--	--	124	17	458	1,416
Pipeline	--	--	24	--	--	--	--	73	--	--	--	--	--	17	0	0	114
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	60	0	0	0	0	60	0	0	60
Total	--	--	482	--	--	--	--	708	--	--	--	--	--	663	57	616	2,526
Naphtha-Type Jet Fuel																	
Refinery	376	36	412	0	539	65	350	954	204	748	446	130	155	1,683	265	932	4,246
Bulk Terminal	--	--	25	--	--	--	--	685	--	--	--	--	--	222	2	547	1,481
Pipeline	--	--	541	--	--	--	--	108	--	--	--	--	--	595	76	315	1,635
Total	--	--	978	--	--	--	--	1,747	--	--	--	--	--	2,500	343	1,794	7,362
Kerosene-Type Jet Fuel																	
Refinery	1,096	0	1,096	41	1,208	107	167	1,523	295	2,308	2,453	8	34	5,098	399	3,615	11,731
Bulk Terminal	--	--	4,523	--	--	--	--	3,468	--	--	--	--	--	1,595	197	2,200	11,983
Pipeline	--	--	3,449	--	--	--	--	1,919	--	--	--	--	--	5,021	178	600	11,167
Total	--	--	9,068	--	--	--	--	6,910	--	--	--	--	--	11,714	774	6,415	34,881
Kerosene																	
Refinery	321	73	394	0	797	30	272	1,099	63	657	539	9	77	1,345	7	291	3,136
Bulk Terminal	--	--	3,179	--	--	--	--	1,288	--	--	--	--	--	602	32	47	5,148
Pipeline	--	--	175	--	--	--	--	116	--	--	--	--	--	360	0	1	652
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	2
Total	--	--	3,748	--	--	--	--	2,503	--	--	--	--	--	2,309	39	339	8,938
Distillate Fuel Oils																	
Refinery	4,059	371	4,430	63	6,385	1,597	3,274	11,319	1,117	8,157	4,174	904	342	14,694	1,969	5,249	37,661
Bulk Terminal	--	--	27,803	--	--	--	--	19,334	--	--	--	--	--	5,326	566	4,876	57,905
Pipeline	--	--	5,879	--	--	--	--	8,324	--	--	--	--	--	7,226	731	989	23,149
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	2
Total	--	--	38,112	--	--	--	--	38,977	--	--	--	--	--	27,248	3,266	11,114	118,717
Residual Fuel Oils																	
Refinery	2,124	111	2,235	41	1,582	175	125	1,923	385	4,633	3,201	145	42	8,406	445	6,788	19,797
Bulk Terminal	--	--	18,370	--	--	--	--	1,664	--	--	--	--	--	4,343	0	2,124	26,501
Pipeline	--	--	0	--	--	--	--	0	--	--	--	--	--	1	0	16	17
Total	--	--	20,605	--	--	--	--	3,587	--	--	--	--	--	12,750	445	8,928	46,315

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, March 1983
(Thousands of Barrels) (continued)

(Thousands of Barrels) (continued)																	
Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.		Dist. V
Naphtha < 400 Deg. Petro. Feedstock																	
Refinery	57	0	57	0	159	0	104	263	92	957	452	37	0	1,538	0	163	2,021
Total	57	0	57	0	159	0	104	263	92	957	452	37	0	1,538	0	163	2,021
Other Oils > 400 Deg. Petro. Feedstock																	
Refinery	4	0	4	0	22	0	1	23	197	1,210	248	0	0	1,655	1	502	2,185
Total	4	0	4	0	22	0	1	23	197	1,210	248	0	0	1,655	1	502	2,185
Special Naphthas																	
Refinery	30	49	79	0	201	0	152	353	36	1,179	21	142	0	1,378	10	238	2,058
Bulk Terminal	--	--	653	--	--	--	--	205	--	--	--	--	--	5	0	24	887
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	98	0	0	0	0	98	0	0	98
Total	--	--	732	--	--	--	--	558	--	--	--	--	--	1,481	10	262	3,043
Lubricants																	
Refinery	1,035	978	2,013	0	811	0	621	1,432	38	3,525	1,488	556	0	5,607	57	653	9,762
Bulk Terminal	--	--	1,322	--	--	--	--	999	--	--	--	--	--	337	3	681	3,342
Total	--	--	3,335	--	--	--	--	2,431	--	--	--	--	--	5,944	60	1,334	13,104
Wax																	
Refinery	23	148	171	0	30	0	46	76	27	218	129	81	0	455	7	62	771
Total	--	--	171	--	--	--	--	76	--	--	--	--	--	455	7	62	771
Petroleum Coke																	
Refinery	585	0	585	0	808	191	861	1,860	2	85	562	275	0	924	831	2,383	6,563
Total	585	0	585	0	808	191	861	1,860	2	85	562	275	0	924	831	2,383	6,583
Asphalt and Road Oil																	
Refinery	1,967	92	2,059	374	3,627	2,277	1,313	7,591	720	478	950	885	278	3,311	2,443	1,743	17,147
Bulk Terminal	--	--	3,263	--	--	--	--	3,371	--	--	--	--	--	359	66	148	7,207
Total	--	--	5,322	--	--	--	--	10,962	--	--	--	--	--	3,670	2,509	1,891	24,354
Miscellaneous Products																	
Refinery	246	40	286	0	72	5	15	92	38	247	141	41	0	467	1	205	1,051
Bulk Terminal	--	--	35	--	--	--	--	31	--	--	--	--	--	62	0	80	208
Pipeline	--	--	19	--	--	--	--	50	--	--	--	--	--	235	0	0	304
Natural Gas Processing Plant	0	0	0	0	1	0	0	1	81	2	0	2	0	85	1	0	87
Total	--	--	340	--	--	--	--	174	--	--	--	--	--	849	2	285	1,650
Total Stocks, All Oils																	
	--	--	172,175	--	--	--	--	272,419	--	--	--	--	--	717,031	36,720	177,101	1,375,446

1 Includes 33,879 thousands of barrels of domestic crude oil.
Sources: See Explanatory Notes on Data Collection and Estimation.
--- Not Applicable.

Table 21. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, March 1983
(Thousands of Barrels)

Commodity	From I to					From II to					From III to					From IV to					From V to				
	II		III		V	I	III		IV	V	I	II		IV	V	II	III		IV	V	I	II		III	IV
Crude Oil (Tanker and Barge only)	33		0		0	0	0	0	0	0	213	1,028	0	0	0	0	0	0	0	0	0	5,000	0	19,742	0
Petroleum Products	7,102	125	0	0	0	0	0	0	0	0	211	75,521	17,369	0	1,954	1,186	442	1,060	0	0	5	0	0	61	0
Natural Gasoline and Isopentane	0	0	0	0	0	0	0	0	0	0	0	0	517	0	0	384	0	0	0	0	0	0	0	0	0
Unfractionated Stream	0	0	0	0	0	0	0	0	0	0	0	0	686	0	0	70	442	0	0	0	0	0	0	0	0
Plant Condensate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Liquefied Petroleum Gases	0	14	0	0	0	552	2,203	124	0	0	0	1,726	3,905	0	0	0	0	0	0	0	0	0	0	0	0
Unfinished Oils	0	0	0	0	0	0	0	0	0	0	0	1,422	431	0	0	0	0	0	0	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	71	950	0	0	0	0	0	0	0	0	0	0	0	0
Aviation Gasoline Blending Components	5,167	71	0	0	0	1,794	1,999	1,381	0	0	0	43,766	6,676	0	937	465	0	709	0	0	0	0	0	0	0
Finished Motor Gasoline	2,719	0	0	0	0	773	1,325	731	0	0	0	17,873	3,030	0	527	294	0	481	0	0	0	0	0	0	0
Finished Leaded Motor Gasoline	2,448	71	0	0	0	1,021	674	650	0	0	0	25,893	3,646	0	410	171	0	228	0	0	0	0	0	0	0
Finished Unleaded Motor Gasoline	8	0	0	0	0	0	0	12	0	0	0	211	126	0	16	0	0	0	0	0	0	0	0	0	0
Finished Aviation Gasoline	132	0	0	0	0	31	63	0	0	0	0	593	48	0	240	63	0	58	0	0	0	0	0	0	0
Naphtha-Type Jet Fuel	277	0	0	0	0	144	97	567	0	0	0	8,583	1,225	0	219	10	0	57	0	0	0	0	0	0	0
Kerosene-Type Jet Fuel	48	0	0	0	0	1	0	0	0	0	0	830	28	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene	1,413	6	0	0	0	179	988	225	0	0	0	14,786	1,652	0	416	194	0	236	0	1	0	0	0	0	0
Distillate Fuel Oil	0	3	0	0	0	164	154	0	0	0	211	2,133	453	0	97	0	0	0	0	0	4	0	0	0	0
Residual Fuel Oil																									
Naphtha and Other Oils for Petro. Feedstock	18	0	0	0	0	19	9	0	0	0	0	53	64	0	0	0	0	0	0	0	0	0	0	0	0
Special Naphthas	0	0	0	0	0	15	0	0	0	0	0	255	98	0	0	0	0	0	0	0	0	0	0	0	0
Lubricants	0	0	0	0	0	37	60	0	0	0	0	683	252	0	29	0	0	0	0	0	0	0	0	39	0
Wax	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	0	0	0	0	0	0	0	0	0	0	0	202	222	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Products	39	31	0	0	0	141	110	0	0	0	0	203	36	0	0	0	0	0	0	0	0	0	0	22	0
Total All Products	7,135	125	0	0	0	3,077	6,268	2,309	211	75,734	18,397	0	1,954	1,186	442	1,060	5,005	0	19,803	0	0	0	0	0	0

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 22. Movements of Petroleum Products by Pipeline between PAD Districts, March 1983
(Thousands of Barrels)

Commodity	From I to			From II to			From III to			From IV to			From V to		
	II	III	I	I	III	IV	I	II	IV	V	II	III	V	III	IV
Natural Gasoline and Isopentane	0	0	0	0	566	0	0	0	517	0	0	384	0	0	0
Unfractionated Stream	0	0	0	0	19	0	0	0	686	0	0	70	442	0	0
Plant Condensate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Liquefied Petroleum Gases	0	0	552	2,203	0	124	1,423	3,905	0	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0	950	0	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	1,636	1,817	0	1,381	32,900	5,691	0	925	465	0	709	0	0
Finished Motor Gasoline	2,118	0	707	1,143	731	13,432	2,591	0	527	294	0	481	0	0	0
Finished Leaded Motor Gasoline	1,811	0	929	674	650	19,468	3,100	0	398	171	0	228	0	0	0
Finished Unleaded Motor Gasoline	8	0	0	0	12	27	82	0	0	0	0	0	0	0	0
Finished Aviation Gasoline	31	0	31	63	0	375	48	0	240	63	0	58	0	0	0
Naphtha-Type Jet Fuel	170	0	119	97	567	5,395	1,043	0	219	10	0	57	0	0	0
Kerosene	23	0	0	0	0	614	28	0	0	0	0	0	0	0	0
Distillate Fuel Oil	972	0	150	923	225	11,762	1,206	0	416	194	0	236	0	0	0
Residual Fuel Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Products	0	0	132	0	0	0	0	0	0	0	0	0	0	0	0
Total	5,133	0	2,620	5,688	2,309	52,496	14,156	0	1,800	1,186	442	1,060	0	0	0

Source: See Explanatory Notes on Data Collection and Estimation.

Table 23. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, March 1983
(Thousands of Barrels)

Commodity	From I to			From II to			From III to			From IV to			From V to		
	II	III	V	I	III	V	I	New Eng	Cent Atl	Low Atl	II	V	I	II	III
Crude Oil	33	0	0	0	0	0	213	0	213	0	1,028	0	5,000	0	19,742
Petroleum Products	1,969	125	0	457	580	211	23,025	1,541	3,829	17,655	3,213	154	5	0	61
Liquefied Petroleum Gases	0	14	0	0	0	0	303	0	0	303	0	0	0	0	0
Unfinished Oils	0	0	0	0	0	0	1,422	0	1,422	0	431	0	0	0	0
Motor Gasoline Blending Components	1,238	0	0	0	0	0	71	0	0	71	0	0	0	0	0
Finished Motor Gasoline	0	0	0	0	0	0	10,866	424	68	10,374	985	12	0	0	0
Finished Aviation Gasoline	0	71	0	158	182	0	184	13	73	98	44	16	0	0	0
Naphtha-Type Jet Fuel	101	0	0	0	0	0	218	13	694	205	0	0	0	0	0
Kerosene	107	0	0	25	0	0	3,188	252	96	32	0	0	0	0	0
Distillate Fuel Oil	25	0	0	1	0	0	216	446	669	1,909	446	0	1	0	0
Residual Fuel Oil	441	6	0	29	65	0	3,024	270	0	1,963	453	97	4	0	0
Naphtha and Other Oils for Petro. Feed. Use	18	3	0	164	154	211	2,133	0	8	45	64	0	0	0	0
Special Naphthas	0	0	0	19	9	0	53	22	128	105	98	0	0	0	39
Lubricants	0	0	0	37	60	0	683	0	533	150	252	29	0	0	0
Wax	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0
Asphalt and Road Oil	0	0	0	0	0	0	202	0	0	202	222	0	0	0	0
Miscellaneous Products	39	31	0	9	110	0	203	13	134	56	36	0	0	0	22
Total	2,002	125	0	457	580	211	23,238	1,541	4,042	17,655	4,241	154	5,005	0	19,803

Source: See Explanatory Notes on Data Collection and Estimation.

Table 24. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker and Barge Between PAD Districts, March 1983
(Thousands of Barrels)

Commodity	P.A.D. District I			P.A.D. District II			P.A.D. District III			P.A.D. District IV			P.A.D. District V		
	Receipts into PADD I	Shipments from PADD I	Net Receipts PADD I	Receipts into PADD II	Shipments from PADD II	Net Receipts PADD II	Receipts into PADD III	Shipments from PADD III	Net Receipts PADD III	Receipts into PADD IV	Shipments from PADD IV	Net Receipts PADD IV	Receipts into PADD V	Shipments from PADD V	Net Receipts PADD V
Crude Oil (Tanker and Barge only)	5,213	33	5,180	1,061	0	1,061	19,742	1,241	18,501	0	0	0	0	24,742	-24,742
Petroleum Products	78,603	7,227	71,376	25,657	11,865	13,792	6,896	94,844	-87,948	2,309	2,688	-379	3,225	66	3,159
Natural Gasoline	0	0	0	901	566	335	517	49	-384	0	0	-384	0	0	0
Unfractionated Stream	0	0	0	756	19	737	461	686	-225	0	512	-512	0	0	0
Plant Condensate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Liquefied Petroleum Gases	2,278	14	2,264	3,905	2,879	1,026	2,217	5,631	-3,414	124	0	124	0	0	0
Unfinished Oils	1,422	0	1,422	431	0	431	0	1,853	-1,853	0	0	0	0	0	0
Motor Gasoline Blending Components	71	0	71	950	0	950	0	1,021	-1,021	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	45,560	5,238	40,322	12,308	5,174	7,134	2,070	51,379	-49,309	1,381	1,174	207	1,646	0	1,646
Finished Leaded Motor Gasoline	18,646	2,719	15,927	6,043	2,829	3,214	1,325	21,430	-20,105	731	775	-44	1,008	0	1,008
Finished Unleaded Motor Gasoline	26,914	2,519	24,395	6,265	2,345	3,920	745	29,949	-29,204	650	399	251	638	0	638
Finished Aviation Gasoline	211	8	203	134	12	122	0	353	-353	12	0	12	16	0	16
Naphtha-Type Jet Fuel	624	132	492	243	94	149	63	881	-818	0	121	-121	298	0	298
Kerosene-Type Jet Fuel	8,727	277	8,450	1,512	808	704	97	10,027	-9,930	567	67	500	276	0	276
Kerosene	831	48	783	76	1	75	0	858	-858	0	0	0	0	0	0
Distillate Fuel Oil	14,966	1,419	13,547	3,259	1,392	1,867	994	16,854	-15,860	225	430	-205	652	1	651
Residual Fuel Oil	2,301	3	2,298	453	529	-76	157	2,683	-2,526	0	0	0	308	4	304
Naphtha and Other Oils for Petro.															
Feedstock Use	72	18	54	82	28	54	9	117	-108	0	0	0	0	0	0
Special Naphthas	270	0	270	98	15	83	0	353	-353	0	0	0	0	0	0
Lubricants	720	0	720	252	97	155	99	964	-865	0	0	0	29	39	-10
Wax	4	0	4	0	0	0	0	4	-4	0	0	0	0	0	0
Asphalt and Road Oil	202	0	202	222	0	222	0	424	-424	0	0	0	0	0	0
Miscellaneous Products	344	70	274	75	251	-176	163	239	-76	0	0	0	0	22	-22
Total All Products	83,816	7,260	76,556	26,718	11,865	14,853	26,638	96,085	-69,447	2,309	2,688	-379	3,225	24,808	-21,583

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 25. Production of Residual Fuel Oil By Sulfur Content, March 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States			
	East Coast #1	Appalachian Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Rocky Mt.	Dist. V West Coast	
Residual Fuel Oil	3,061	118	3,179	36	1,378	194	368	1,976	711	5,304	3,649	338	87	10,089	309	10,260	25,813
0.00 to 0.30% Sulfur	28	44	72	0	62	0	0	62	43	454	634	80	5	1,216	60	596	2,006
0.31 to 1.00% Sulfur	1,040	1	1,041	36	485	0	284	805	570	1,757	1,334	144	3	3,808	80	2,061	7,795
Greater Than 1.00% Sulfur	1,993	73	2,066	0	831	194	84	1,109	98	3,093	1,681	114	79	5,065	169	7,603	16,012

Source: See Explanatory Notes on Data Collection and Estimation.

Table 26. Stocks of Residual Fuel Oil By Sulfur Content, March 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico		Total	Dist. IV Rocky Mt.	Dist. V West Coast
Residual Fuel Oil -- 0.00 to 0.30% Sulfur																
Refinery	125	40	165	0	117	0	2	119	69	168	297	15	18	567	106	422
Bulk Terminal	--	--	4,356	--	--	--	--	117	--	--	--	--	--	0	0	4,473
Total	--	--	4,521	--	--	--	--	236	--	--	--	--	--	567	106	422
Residual Fuel Oil -- 0.31 to 1.00% Sulfur																
Refinery	789	1	790	41	604	0	53	698	227	1,655	978	60	4	2,924	80	1,517
Bulk Terminal	--	--	5,839	--	--	--	--	521	--	--	--	--	--	2,116	0	431
Total	--	--	6,629	--	--	--	--	1,219	--	--	--	--	--	5,040	80	1,948
Residual Fuel Oil -- Greater than 1.00% Sulfur																
Refinery	1,210	70	1,280	0	861	175	70	1,106	89	2,810	1,926	70	20	4,915	259	4,849
Bulk Terminal	--	--	8,175	--	--	--	--	1,026	--	--	--	--	--	2,227	0	1,693
Total	--	--	9,455	--	--	--	--	2,132	--	--	--	--	--	7,142	259	6,542
																25,530

Sources: See Explanatory Notes on Data Collection and Estimation.

-- Not Applicable

Table 27. Movements of Residual Fuel Oil by Tanker and Barge Between PAD Districts, By Sulfur Content, March 1983
(Thousands of Barrels)

Commodity	From I to			From II to			From III to			From V to		
	II	III	V	I	III	V	I	New Eng	Cent Atl	Low Atl	II	III
Residual Fuel Oil	0	3	0	164	154	211	2,133	270	0	1,863	453	97
0.00 to 0.30% Sulfur	0	0	0	0	0	0	0	0	0	0	0	0
0.31 to 1.00% Sulfur	0	0	0	17	0	0	142	0	0	142	0	0
Greater Than 1.00% Sulfur	0	3	0	147	154	211	1,991	270	0	1,721	453	97

Source: See Explanatory Notes on Data Collection and Estimation.

Table 28. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, March 1983
(Thousands of Barrels)

Country	Residual Fuel Oil			
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%	Total
Arab OPEC				
Algeria	1,014	0	0	1,014
Iraq	0	0	0	0
Kuwait	0	0	0	0
Qatar	0	0	0	0
Saudi Arabia	0	0	0	0
United Arab Emirates	0	0	0	0
Subtotal Arab OPEC	1,014	0	0	1,014
Other OPEC				
Ecuador	0	0	119	119
Gabon	0	0	0	0
Indonesia	0	4	4	8
Iran	0	0	0	0
Nigeria	0	0	0	0
Venezuela	2,143	1,064	4,080	7,287
Subtotal Other OPEC	2,143	1,067	4,203	7,413
Other				
Angola	0	0	0	0
Australia	0	0	0	0
Bahamas	909	0	0	909
Bolivia	0	0	0	0
Brazil	666	662	0	1,328
Brunei	0	0	0	0
Canada	2	649	516	1,167
Congo	0	201	0	201
Egypt	0	0	0	0
France	0	0	0	0
Ghana	0	0	0	0
Liberia	0	0	0	0
Malaysia	0	0	0	0
Mexico	0	0	129	129
Netherlands	0	0	0	0
Netherlands Antilles	677	481	3,535	4,692
Norway	0	0	0	0
Oman	0	0	0	0
People's Republic of China	0	5	0	5
Peru	0	0	0	0
Puerto Rico	0	0	0	0
Romania	0	0	0	0
Spain	0	0	0	0
Trinidad	0	0	0	0
Tunisia	0	0	0	0
United Kingdom	0	245	0	245
Virgin Islands	1,193	448	850	2,491
Yugoslavia	0	0	0	0
Zaire	0	0	0	0
Other Western Hemisphere	196	850	0	1,046
Other Eastern Hemisphere	211	364	57	631
Subtotal Other	3,854	3,905	5,087	12,846
Total Imports	7,010	4,973	9,290	21,273

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 29. Imports of Residual Fuel Oil by Sulfur Content by State of Entry, March 1983
(Thousands of Barrels)

State	Residual Fuel Oil				Total
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%		
PAD District I	6,273	4,203	8,823		19,300
Connecticut	71	190	0		261
Delaware	0	468	0		468
Florida	0	138	1,647		1,785
Georgia	0	0	60		60
Maine	0	211	1,201		1,413
Maryland	224	0	290		514
Massachusetts	0	447	1,906		2,353
New Jersey	309	337	830		1,475
New York	5,324	1,514	1,568		8,405
North Carolina	149	0	159		308
Pennsylvania	196	658	113		967
Rhode Island	0	241	0		241
South Carolina	0	0	259		259
Vermont	0	0	0		0
Virginia	0	0	789		789
PAD District II	2	419	277		698
Illinois	0	234	56		289
Michigan	0	171	143		314
Minnesota	2	0	41		43
North Dakota	0	0	37		37
Ohio	0	14	0		14
PAD District III	349	200	129		677
Louisiana	0	0	129		129
Texas	349	200	0		549
PAD District IV	0	0	0		0
PAD District V	387	150	61		598
Arizona	0	0	0		0
California	0	0	0		0
Hawaii	49	150	61		261
Oregon	110	0	0		110
Washington	227	0	0		227
All PAD Districts	7,010	4,973	9,290		21,273

Note: Total may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.

Glossary





Definitions of Petroleum Products and Other Terms

Alcohol. The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group; $\text{CH}-(\text{CH})_n-\text{OH}$. *Alcohol* includes methanol and ethanol.

Alkylation. A refinery process for chemically combining isoparaffin with olefin hydrocarbons. The product, alkylate, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

API Gravity. An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it may be calculated in terms of the following formula:

$$\text{Deg API} = \frac{141.5}{\text{sp gr } 60\text{F}/60\text{F}} - 131.5$$

Aromatics. Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene.

Asphalt. A dark-brown-to-black cement-like material, containing bitumens as the predominant constituents, obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. The conversion factor for asphalt is 5.5 barrels of 42 U.S. gallons per short ton.

ASTM. The acronym for the American Society for Testing and Materials.

Aviation Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation gasoline.

Aviation Gasoline, Finished. All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G-5572. Excludes blending components which will be used in blending or compounding into finished aviation gasoline.

Barrel. A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt and wax to barrels are given in the definitions for these products.

Barrels per Calendar Day. The maximum number of barrels of input that can be processed in a twenty-four hour period after making allowances for the following limitations: downstream limitations, environmental constraints, types and grades of inputs, planned and unplanned downtime, and types and grades of products.

Barrels Per Stream Day. The amount a unit can process running at full capacity under optimal crude and product slate conditions.

Bi-metallic. A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of two metals (e.g., platinum, rhenium).

Butane. A normally gaseous paraffinic hydrocarbon, C_4H_{10} . It is extracted from natural gas or refinery gas streams. Butane is covered by ASTM Specification D1835 and Gas Processors Association Specification for commercial butane.

Isobutane. A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 10.9 degrees F. This classification includes mixtures of gases that contain 80 percent liquid volume or more isobutane. It is extracted from natural gas and refinery gas streams.

Normal Butane. A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 31.1 degrees F. This classification includes mixtures of gases that contain 80 percent or more normal butane.

Other Butanes. All butanes not included as normal butane or isobutane.

Butane-Propane Mixtures. Mixtures consisting exclusively of butane and propane that conform to ASTM Specification D1835 and Gas Processors Association Specification for commercial butane-propane mixtures. They are extracted from natural gas and refinery gas streams.

Butylene. An olefinic hydrocarbon, C_4H_8 , recovered from refinery processes.

Catalytic Cracking. The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil.

Catalytic Hydrocracking. A refining process for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel and/or high grade fuel oil. Hydrocracking is an efficient, relatively low temperature process using hydrogen and a catalyst.

Catalytic Hydrotreating. A process for treating petroleum fractions (e.g., distillate fuel oil and residual fuel oil) and unfinished oils (e.g., naphthas, reformer feeds and heavy gas oil) in the presence of catalysts and substantial quantities of hydrogen to upgrade their quality.

Catalytic Reforming. The use of controlled heat and pressure with catalysts to effect the rearrangement of certain hydrocarbon molecules without altering their composition appreciably; the conversion of low-octane

gasoline fractions into higher octane stocks suitable for blending into finished gasoline; also the conversion of naphthas to obtain a more volatile product of higher octane number.

Conventional. A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of a metal and a non-metal (e.g., platinum, alumina).

Coal. A generic term applied to carbonaceous rocks that were formed by the partial or complete decomposition of vegetation. These stratified carbonaceous rocks are either solid or brittle and are highly combustible. Includes lignite, bituminous coal, and anthracite coal which conform to ASTM Specification D388.

Crude Distillation. The refining process of separating crude oil components by heating and subsequent condensing of the fractions by cooling.

Crude Oil (including Lease Condensate). A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite and oil shale. Drip gas is also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign according to the following:

Domestic. Crude oil produced in the United States or from its outer continental shelf as defined in 43 U.S.C. 1331.

Foreign. Crude oil produced outside the United States.

Delayed Coaking. A process to produce low Conradson carbon gas for catalytic cracking feedstock and for gasoline.

Distillate Fuel Oil. A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1, No. 2, and No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuel.

No. 1 Fuel Oil. A light distillate fuel oil intended for use in vaporizing pot-type burners. ASTM Specification D396 specifies for this grade maximum distillation temperatures of 420 degrees F. at the 10-percent point and 550 degrees F. at the 90-percent point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100 degrees F.

No. 2 Fuel Oil. A distillate fuel oil for use in atomizing-type burners for domestic heating or for moderate capacity commercial-industrial burner units. ASTM

Specification D396 specifies for this grade distillation temperatures at the 90-percent point between 540 degrees and 640 degrees F., and kinematic viscosities between 2.0 and 3.6 centistokes at 100 degrees F.

No. 1 and No. 2 Diesel Fuel Oils. Distillate fuel oils used in compression-ignition engines, as given by ASTM Specification D975:

No. 1-D. A volatile distillate fuel oil with a boiling range between 300-575 degrees F. and used in high-speed diesel engines generally operated under wide variations in speed and load. Includes type C-B diesel fuel used for city buses and similar operations. Properties are defined in ASTM Specifications D975.

No. 2-D. A gas oil type distillate of lower volatility with distillation temperatures at the 90-percent point between 540-640 degrees F. for use in high-speed diesel engines generally operated under uniform speed and load conditions. Includes Type R-R diesel fuel used for railroad locomotive engines, and Type T-T for diesel-engine trucks. Properties are defined in ASTM Specification D975.

No. 4 Fuel Oil. A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D396 or Federal Specification VV-F-815C; its kinematic viscosity is between 5.8 and 26.4 centistokes at 100 degrees F. Also included is No. 4-D, a fuel oil for low- and medium-speed diesel engines that conforms to ASTM Specification D975.

Eastern Hemisphere. That half of the earth east of the Atlantic Ocean which includes Europe, Asia, Africa, and Australia. The Hawaiian Foreign Trade Zone is in this hemisphere.

Electric Energy (Purchased). Electricity purchased for refinery operations that is not produced within the refinery complex.

Ethane. A normally gaseous paraffinic compound (C₂H₆) extracted from natural gas and refinery gas streams. "Ethane" includes any products containing 90 percent liquid volume or more ethane.

Ethane-Propane Mixtures. Mixtures of ethane and propane in which neither component is 90 percent or more of the liquid volume. It is extracted from natural gas and refinery gas streams.

Ethylene. An olefinic hydrocarbon, (C₂H₄) recovered from refinery or petrochemical processes.

Field Production. Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, and new supply of other hydrocarbons and alcohol.

Fluid Coking. A thermal process utilizing the fluidized-solids technique for continuous conversion of heavy, low-grade oils into lighter products.

Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation or motor gasoline.

Gas Oil. A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. Derives its name from having originally been used in the manufacture of illuminating gas. Now supplies distillate-type fuel oils and diesel fuel, also cracked to produce gasoline.

Imported Crude Oil Burned as Fuel. The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. *Imported crude oil burned as fuel* includes lease condensate and liquid hydrocarbons produced from tar sand oil, gilsonite, and oil shale.

Isomerization. A refining process which alters the fundamental arrangement of atoms in the molecule. Used to convert normal butane into isobutane, an alkylation process feedstock, and normal pentane and hexane into isopentane and isohexane, high-octane gasoline components.

Kerosene. A petroleum distillate that boils at a temperature between 300-550 degrees F., that has a flash point higher than 100 degrees F. by ASTM Method D56, that has a gravity range from 40-46 degrees API, and that has a burning point in the range of 150-175 degrees F. Included are the two classifications recognized by ASTM D-3699: No. 1-K and No. 2-K, and all grades of kerosene called range or stove oil which have properties similar to No. 1 fuel oil, but with a gravity of about 43 degrees API and a maximum end-point of 625 degrees F. Kerosene is used in space heaters, cook stoves, and water heaters and is suitable for use as an illuminant when burned in wick lamps.

Kerosene-Type Jet Fuel. A quality kerosene product with an average gravity of 40.7 degrees API, a 10 percent distillation temperature of 400 degrees F. It is covered by ASTM Specification D1655 and Military Specifications MIL-T-5624L (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type; it is used primarily for commercial turbojet and turbo-prop aircraft engines.

Lease Condensate. A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

Liquefied Petroleum Gases (LPG). Propane, propylene, butanes, butylene, butane-propane mixtures, ethane-propane mixtures, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

Liquefied Refinery Gases (LRG). Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration they are retained in the liquid state. The reported categories are ethane and/or ethylene, propane and/or propylene, butane and/or butylene, butane-propane mixtures, and isobutane. Excludes still gases used for chemical or rubber manufacture which are reported as a petrochemical feedstock and also excludes liquefied gases ready for blending into gasoline which are reported as gasoline blending components. Liquefied refinery gases are reported for use as petrochemical feedstocks or other uses.

Lubricating Oils. A substance used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. *Lubricants* includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. The three categories include Bright Stock, Neutral, and Other.

Bright Stock. A refined, high viscosity lubricating oil base stock that is usually made from residuum by a treatment such as deasphalting, acid treatment, or solvent extraction.

Neutral. A distillate lubricating oil base stock with a viscosity that is usually not above 550 Saybolt Universal Seconds (SUS) at 100 degrees F. It is prepared by a treatment such as hydrofining, acid treatment, or solvent extraction.

Other. A lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils.

Middle Distillates. A general classification that includes distillate fuel oil and kerosene.

Miscellaneous Products. Includes all finished products not classified elsewhere, e.g., petrolatum, absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, speciality oils and medicinal oils.

Motor Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished motor gasoline. Pool gasoline is included in this category.

Motor Gasoline, Finished. A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition engines. Specifications for motor gasoline, as given in ASTM Specification D439 or Federal Specification VV-G-1690B, include a boiling range of 122 degrees to 158 degrees F. at the 10-percent point to 365 degrees to 374 degrees F. at the 90-percent point and a Reid vapor pressure range from 9 to 15 psi. *Motor gasoline* includes finished leaded gasoline, finished unleaded gasoline, and gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Finished Leaded Gasoline. Contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon. The actual lead content of any given gallon, however, may vary as a function of the size of the producer and company according to specific Environmental Protection Agency waiver provisions. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Finished Unleaded Gasoline. Contains not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes unleaded gasohol. Blend stock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Gasohol. A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol) in which 10 percent or more of the product is alcohol.

Motor Gasoline, Total. Includes finished leaded motor gasoline, finished unleaded motor gasoline, motor gasoline blending components, and gasohol.

Naphtha-Type Jet Fuel. A fuel in the heavy naphtha boiling range with an average gravity of 52.8 degrees API and 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees F., meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

Natural Gas. A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

Natural Gas Field Facility. A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, butane, natural gasoline, etc., and to control the quality of natural gas to be marketed.

Natural Gas Plant Liquids. Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials, and are classified as follows: Ethane, propane, ethane-propane mix, isobutane, butane, butane-propane mix, isopentane, natural gasoline, plant condensate, unfractionated stream, and other products from natural gas processing plants (i.e., products meeting the standards of finished petroleum products produced at natural gas processing plants, such as finished

motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

Natural Gasoline and Isopentane. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, C₅H₁₂, obtained by fractionation of natural gasoline or isomerization of normal pentane.

OPEC. The acronym for the Organization of Petroleum Exporting Countries, oil-producing and exporting countries that have organized for the purpose of negotiating with oil companies on matters of oil production, prices, and future concession rights. Current members are Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

Operable Distillation Capacity. The maximum amount of input that can be processed by a crude oil distillation unit in a 24-hour period, making allowances for processing limitations due to types and grades of inputs, limitations of downstream facilities, scheduled and unscheduled downtimes, and environmental constraints. Includes any shutdown capacity that could be placed in operation within days.

Other Hydrocarbons. Materials received by a refinery and consumed as raw materials. Includes hydrogen, coal tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

Petrochemical Feedstock Use. Chemical feedstocks derived from petroleum, principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are *Naphtha-less than 400 degrees F. end-point* and *Other oils-over 400 degrees F. end-point*.

Naphtha-Less Than 400 Degrees F. End-Point. A naphtha with an end point of less than 400 degrees F. that is reported as used as a petrochemical feedstock.

Other Oils-Over 400 Degrees F. End-Point. Oils with an end point over 400 degrees F. that is reported as used as a petrochemical feedstock.

Petroleum Coke. A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is five barrels of 42 U.S. gallons per short ton.

Marketable Coke. Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This *green* coke may be sold or further purified by calcining.

Catalyst Coke. In many catalytic operations (i.e., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refinery process. This carbon or coke is not recoverable in a concentrated form.

Petroleum Products. Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, natural gasoline and isopentane, plant condensate, unfractionated stream, liquefied petroleum gases, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, naphtha less than 400° F. end-point, other oils-over 400° F. end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Petroleum Refinery. An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

Plant Condensate. One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

Petroleum Refinery. An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas plant liquids, other hydrocarbons, and alcohol.

Plant Condensate. One of the natural gas plant liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

Primary Stocks. Stocks of crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tankfarms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in transit from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. *Primary Stocks* excludes stocks of foreign origin that are held in bonded warehouse storage.

Propane. A normally gaseous paraffinic compound, C₃H₈, which includes all products covered by NGPA Specification for commercial and HD-5 propane and ASTM Specification D1835. It is used primarily as a fuel and as a petrochemical feedstock.

Propylene. An olefinic hydrocarbon, C₃H₆, recovered from refinery or petrochemical processes.

Residual Fuel Oil. The topped crude of refinery operation which includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D396 and Federal Specification VV-F-815C, Navy Special fuel oil as defined in Military

Specification MIL-F-859E including Amendment 2 (NATO Symbol F-77), and Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Includes imported crude oil to be burned as a fuel.

Road Oil. Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades from 0, the most liquid, to 5, the most viscous.

Special Naphthas. All finished products within the gasoline range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point and have a boiling range of 90 degrees to 220 degrees F. *Special naphthas* includes all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

Steam (Purchased). Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

Still Gas (Refinery Gas). Any form or mixture of gas produced in refineries by distillation cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, butane, butylene, propane, propylene, etc. Still gas is reported for petrochemical feedstock use and/or refinery fuel use.

Petrochemical Feedstock Use. Includes all refinery streams which are used by chemical or rubber manufacturing operations for further processing, less the amount of such streams returned to the source refinery. Finished petrochemical products are not included. For example, polyethylene, butadiene, etc., are considered petrochemical products; therefore, only their feed-stock equivalents are included.

Fuel Use. All other still gas.

Strategic Petroleum Reserve (SPR). Stocks (currently, only crude oil) maintained by the Federal Government for use during periods of major supply interruption.

Thermal Cracking. A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking is used to increase the yield of gasoline obtainable from crude oil.

Unfinished Oils. Includes all oils requiring further processing, except those requiring only mechanical blending.

Unfractionated Streams. Mixtures of unsegregated natural gas liquid components excluding those included in plant condensate. This product is extracted from natural gas.

Vacuum Distillation. Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique, with its relatively low temperatures, prevents cracking or decomposition of the charge stock.

Visbreaking. A thermal cracking process in which heavy vacuum-still bottoms produced on the primary distillation unit are cracked to increase production of distillate products.

Wax. A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42-gallon barrel.

Microcrystalline Wax. Wax extracted from certain petroleum residues having a finer and less apparent

crystalline structure than paraffin wax and having the following physical characteristics:

Penetration at 77 degrees F. (D-1321)-60 maximum. Viscosity at 210 degrees F. in Saybolt Universal Seconds (SUS) (D-88)-60 SUS (10.22 centistokes) minimum to 150 SUS (31.8 centistokes) maximum. Oil content (D-721)-5 percent minimum.

Crystalline-Fully Refined Wax. A light-colored paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D-88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D-721)-0.5 percent maximum. Other + 20 color, Saybolt minimum.

Crystalline-Other Wax. A paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D-88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D-721)-0.51 percent minimum to 15 percent maximum.

Western Hemisphere. That half of the earth that includes North and South America and the surrounding waters.

Bureau of Mines Petroleum Refining Districts and PAD Districts

The following are the Bureau of Mines petroleum refining districts which make up the PAD districts:

PAD District I

East Coast: District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

Appalachian #1: The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

PAD District II

Appalachian #2: The following counties of the State of Ohio: Erie, Huron, Crawford, Marion, Delaware, Franklin, Pickaway, Ross, Pike, Scioto, and all counties east thereof.

Indiana—Illinois—Kentucky: The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and that part of the State of Ohio not included in the Appalachian District.

Minnesota—Wisconsin—North and South Dakota: The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

Oklahoma—Kansas—Missouri: The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

PAD District III

Texas Inland: The State of Texas except the Texas Gulf Coast District.

Texas Gulf Coast: The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

Louisiana Gulf Coast: The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

North Louisiana—Arkansas: The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

New Mexico: The State of New Mexico.

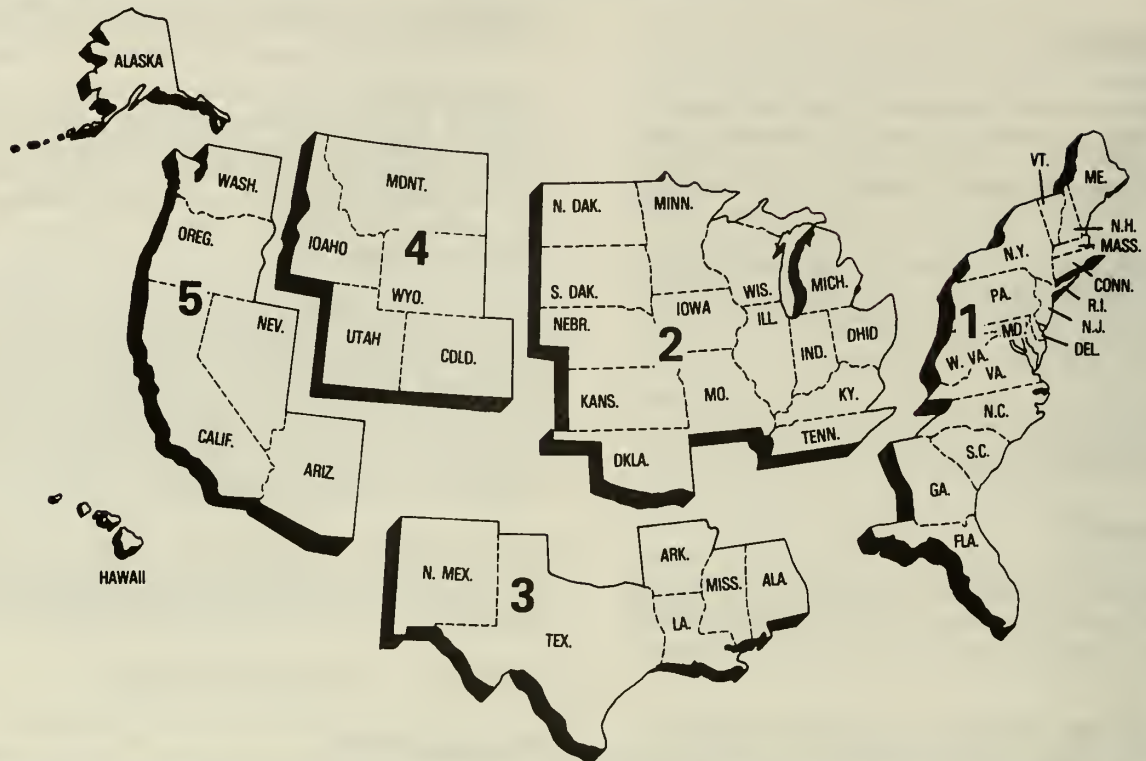
PAD District IV

Rocky Mountain: The States of Montana, Idaho, Wyoming, Utah, and Colorado.

PAD District V

West Coast: The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

Petroleum Administration for Defense (PAD) Districts



Bureau of Mines Refining Districts



District Map Oil and Gas Division Railroad Commission of Texas



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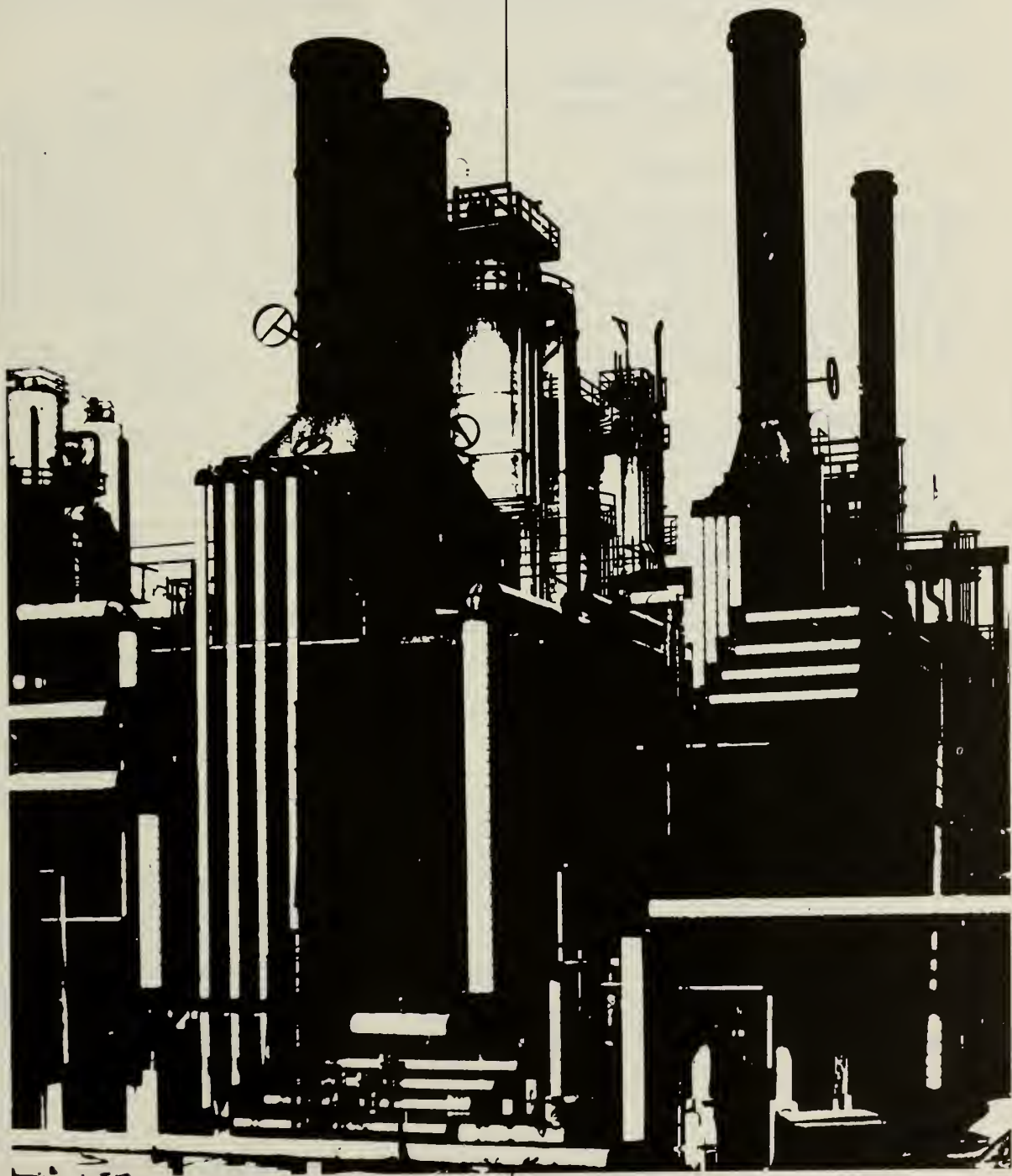
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Explanatory Notes





Note 1: Data Collection Methodology

Background

Beginning in January 1983, the Energy Information Administration (EIA) unified its petroleum supply data collection activities into the Petroleum Supply Reporting System (PSRS). The PSRS represents a family of data collection survey forms, data processing systems and publication systems that have been consolidated to achieve comparability and consistency throughout. The primary focus of the consolidation has been to revise the weekly and monthly survey reporting forms to assure consistency in form layout, preparation instructions, and definitions. As a result, a new set of survey forms were implemented in January 1983. The following are the new form numbers and their corresponding predecessor forms:

New Form Number	Name	Old Form Number
EIA-800	Weekly Refinery Report	EIA-161
EIA-801	Weekly Bulk Terminal Report	EIA-162
EIA-802	Weekly Product Pipeline Report	EIA-163
EIA-803	Weekly Crude Oil Stocks Report	EIA-164
EIA-804	Weekly Imports Report	EIA-165
EIA-805	Weekly Shipments from Puerto Rico to the United States Report	—
EIA-810	Monthly Refinery Report	EIA-87
EIA-811	Monthly Bulk Terminal Report	EIA-88
EIA-812	Monthly Product Pipeline Report	EIA-89
EIA-813	Monthly Crude Oil Report	EIA-90
ERA-60	Monthly Imports Report	ERA-60
EIA-815	Monthly Shipments from Puerto Rico to the United States Report	FEA-P133-M-0
EIA-816	Monthly Natural Gas Liquids Report	EIA-64
EIA-817	Monthly Tanker and Barge Movement Report	EIA-170

Forms EIA-800 through 805 comprise the Weekly Petroleum Supply Reporting System (WPSRS). This system is designed to collect basic refinery operations and product stock data for major products on a weekly basis. Data from the WPSRS are published in the *Weekly Petroleum Status Report (WPSR)* and are also used to calculate the preliminary statistics in the "Summary Statistics" section of the *Petroleum Supply Monthly*

(PSM). A description of the WPSRS survey forms follows in Note 1.1.

Forms EIA-810-813, 815-817 and ERA-60 comprise the Monthly Petroleum Supply Reporting System (MPSRS). These surveys collect detailed refinery operations data, refinery, bulk terminal and pipeline stocks data, crude oil and petroleum product imports data and movements of petroleum products and crude oil between PAD Districts data. These surveys are the primary source of data for the "Summary Statistics" and "Detailed Statistics" sections of the PSM. A description of MPSRS survey forms follows in Note 1.2.

Data are also obtained in magnetic tape form from the Bureau of the Census on a monthly basis. These tapes contain aggregated import and export statistics that are used in the preparation of the PSM. A description of the Census data follows in Note 1.3.

Note 1.1: Weekly Petroleum Supply Reporting System (WPSRS)

Background

The EIA first began publishing weekly petroleum supply statistics in April 1979 in response to the Iranian oil crisis. Initially, the published data were taken from the American Petroleum Institute (API) *Weekly Statistical Bulletin*. However, in January 1980 the EIA began to publish weekly statistics from its own surveys, with the exception of imports statistics which the EIA did not begin collecting until June 1980.

The weekly surveys collect data comparable to those collected on a monthly basis. Selected petroleum companies report weekly data to the EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804, the importer of record reports each shipment entering the United States. On Form EIA-805, a company shipping unfinished oils and finished petroleum products into the United States from Puerto Rico reports each shipment. Current weekly data and the most recent monthly data are used to estimate the totals that are published in the *Weekly Petroleum Status Report*.

Sample Frame

The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Sampled companies report data only for facilities in the 50 States and District of Columbia.

The sample for each survey is taken from the following universe:

EIA-800: Based on the EIA-810 universe, which includes all petroleum refineries in the United States and

its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and plants that produce finished motor gasoline through mechanical blending. The selected sample size is 215.

EIA-801: Based on the EIA-811 universe, which includes all bulk terminal facilities in the United States and its territories that have either a total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline. The selected sample size is 93.

EIA-802: Based on the EIA-812 universe, which includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including interstate, intrastate and intracompany pipeline movements. Pipeline companies that transport only natural gas liquids are not included in the EIA-802 frame. Only those pipeline companies that transport products covered in the weekly survey are included. The selected sample size is 65.

EIA-803: Based on the EIA-813 universe, which consists of crude oil pipeline companies (gathering and trunk pipeline companies) in the United States and its territories, all refining companies, all crude oil producers, all terminal operators, all companies transporting Alaskan Crude Oil by water, and all storers of 1,000 barrels or more of crude oil. The selected sample size is 85.

EIA-804: Based on the ERA-60 universe, which includes all importers of record of crude oil and petroleum products into the United States and Puerto Rico. The selected sample size is 65.

EIA-805: Based on the EIA-815 universe, which includes all shippers of unfinished oils and petroleum products into the United States from Puerto Rico. Four companies report.

Sampling Method

The cut-off method is the sampling procedure used for all weekly surveys except the EIA-802, which uses the monthly universe in its entirety. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous 12-month period. Companies are chosen for the sampling, beginning with the largest and adding companies until the total sample covers 90 percent of the total for the previous time period for each product published in the *Weekly Petroleum Status Report*.

Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. The report period closes each Friday at 7 a.m. All canvassed firms and terminal operations companies must file by 5 p.m. on the following Monday.

EN2

Estimation and Imputation

After company reports have been checked and entered into the weekly data base, weekly totals for given products are estimated by using the following formula.

The total reported by all companies for the most recent month (M_t) is divided by the amount reported by the sample of companies for the most recent month (M_s). The result is multiplied by the amount reported by the sample of companies for the current week (W_s). The answer, W_t , is an estimate of the amount that would have been reported by all companies for the current week if all companies reported each week.

$$W_t = \frac{M_t}{M_s} (W_s)$$

This procedure is used to estimate total weekly inputs to refineries and production.

To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Therefore, an exponentially smoothed ratio has been developed. The estimate of weekly imports is the sum of the smoothed ratio multiplied by the weekly values and estimates for shipments from Puerto Rico. Imports of other oils includes an adjustment from Census data for unlicensed products because of coverage differences between the monthly imports data and Census data.

Explicit imputation is done for companies which do not respond in a given week. The imputed values are exponentially smoothed means of recent reports from the specific company.

Response Rates

The response rate for the published estimates is usually between 95 and 98 percent.

Note 1.2: Monthly Petroleum Supply Reporting System (MPSRS)

Background

The MPSRS was implemented in January 1983 as the result of an extensive effort to integrate the collection and processing of petroleum supply data that have been collected on other survey forms for many years. The collection of monthly petroleum supply statistics began as early as 1918 when the Bureau of Mines (BOM) began collecting data on refinery operations and crude oil stocks and movements. The collection systems

were further expanded to include natural gas plant liquids production and storage in 1925, imports of crude oil and petroleum products and storage and movements of petroleum products in 1959, and tanker and barge movements of crude oil and petroleum products in 1964. Since their inception, each survey has undergone numerous changes, but the MPSRS is the first effort to make them all consistent and comparable.

Respondent Frame

EIA-810: All petroleum refineries and plants that produce finished motor gasoline through the mechanical blending of liquids which are operated or controlled in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, the Hawaiian Foreign Trade Zone, and Guam. Approximately 313 respondents report on the EIA-810.

EIA-811: All bulk terminal facilities in the 50 States and the District of Columbia, Puerto Rico, and the Virgin Islands that (a) have a total bulk storage capacity of 50,000 barrels or more and/or (b) receive petroleum products by tanker, barge, or pipeline, regardless of ownership of the material. Approximately 328 respondents report on the EIA-811.

EIA-812: All products pipeline companies that carry petroleum products (including interstate, intrastate and intracompany pipelines) in the 50 States and the District of Columbia. Approximately 94 respondents report on the EIA-812.

EIA-813: All crude oil pipeline companies (gathering and trunk pipeline companies), crude oil producers, companies transporting Alaskan crude oil by water (in excess of 1,000 barrels), and all storers of crude oil, regardless of ownership, in the 50 States and the District of Columbia. Approximately 180 respondents report on the EIA-813.

EIA-815: All licensed importers and importers of record shipping petroleum products from Puerto Rico into the 50 States and the District of Columbia.

Import data from the ERA-60 and EIA-815 are integrated into the import statistics reported in the *PSM*.

EIA-816: All operators of facilities designed to extract liquid hydrocarbons from natural gas stream (natural gas processing plants) or to separate a hydrocarbon stream into its component products, i.e., propane, butane, natural gasoline, etc. (fractionators). Approximately 990 respondents report on the EIA-816.

EIA-817: All known companies and plants that have custody of crude oil and petroleum products transported by tanker and barge between PAD Districts or between PAD Districts and the Panama Canal. There are about 50 respondents.

ERA-60: All licensed importers and importers of record importing crude oil and petroleum products into the

United States and Puerto Rico. The respondent universe consisted of approximately 1,100 firms as of July 31, 1982. However, only a selected 250 importers must report each month regardless of import activity. All others must report only for a month in which they actually had imports. The respondent universe for this survey is updated whenever an import license is granted by the Office of Oil Imports of the ERA.

EIA utilizes a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review industry publications such as the *Oil and Gas Journal* and *LP Gas Almanac* for information on facilities or companies going into operation or closing down. These are augmented by articles in newspapers, letters from respondents indicating changes in status and information received from survey systems operated by other offices.

Every two to three years an extensive survey study is conducted to completely refresh the frames. This involves consolidating information from every known source including State agencies, federal agencies (e.g., EPA, Corps of Engineers, Census Bureau, etc.), and private industry directories. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

Collection Methods

The data for all of the MPSRS surveys are collected monthly. Completed forms are required to be postmarked by the 20th day following the end of the report month, with the exception of the EIA-815 and ERA-60 which are due 15 work days following the end of the report month. Telephone follow-up calls are made to nonrespondents prior to the publication deadline, for their data. An automated mailing list is maintained and is used to monitor receipt of the forms.

Imputing Missing Data

Imputation is performed only for nonresponding companies that submitted reports the previous month. For such companies, previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. In the event that the previous month's data were estimated, the respondent is contacted and requested to submit estimates, if necessary, to be followed by submission of actual data. Data for nonrespondents on the EIA-815 and 817, and ERA-60 are not imputed.

Response Rates

As of the filing deadline, the response rates of the EIA-810 through EIA-813 respondents is over 90 per-

cent. The response rate for the EIA-816 is over 85 percent and for the EIA-817 it is 98 percent. All companies that have not responded are contacted by telephone. Although data are taken by telephone to expedite processing, a certified submission is still required. Names of companies that fail to file for 2 consecutive months are forwarded for further noncompliance action.

In July 1982, the ERA-60 survey had a response rate of 98 percent by the filing deadline. The universe was 1,100 firms at that time. (Because this is a dynamic survey, the universe is constantly changing.) Standard follow-up of nonrespondents is made to insure that all reports are received, since data are not imputed for nonrespondents. In addition, response is cross-checked with response on the Petroleum Licensing Decrementation System (PLDS), a listing of each month's importers. The response rate is generally 98 to 99 percent by the time the data are first published.

Note 1.3: Census Import (IM-145) and Export (EM-522 and EM-594) Data

Background

Each month the EIA purchases magnetic tapes of aggregated import and export statistics from the Bureau of the Census. These data provide the only source of export statistics and are used to augment the import data collected by the EIA. Export statistics and import data from the Census tapes on liquefied petroleum gases, bonded ships bunkers and military offshore use are published in the *PSM*.

Import Statistics (IM-145)

Coverage

The import statistics reflect both government and non-government imports of merchandise from foreign countries into the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico), without regard to whether or not a commercial transaction is involved. In general, the statistics record the physical movement of merchandise into the United States from foreign countries, with the exception of the following types of transactions that are excluded from the statistics:

1. Merchandise in-transit through the United States, when documented with Customs as an in-transit movement.
2. Shipments from anywhere to U.S. possessions and shipments from U.S. possessions to the United States. (U.S. possessions include Puerto Rico, the Virgin Islands, Guam, and American Samoa.)
3. U.S. merchandise that was held in foreign countries by the U.S. Armed Forces and is returned to the United States for the use of the Armed Forces.

Source of Import Information

The official U.S. import statistics are compiled by the Bureau of the Census from copies of the Import entry and warehouse withdrawal forms that importers are required by law to file with Customs officials (Customs Forms 7501, 7505, and 7506).

Imported petroleum is reported as *Imports for Consumption*. Imports for consumption are a combination of entries for immediate consumption and withdrawals from warehouses for consumption. With certain exceptions as indicated above, these data generally reflect the total of commodities entered into U.S. consumption channels.

Country and Area of Origin

The country reported in the statistics as the country of origin is defined as the country where the merchandise was grown, mined, or manufactured. In instances where the country of origin cannot be determined, the transactions are credited to the country of shipment.

Export Statistics (EM-522 and EM-594)

Coverage

The export statistics reflect both government and non-government exports of domestic and foreign merchandise from the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico) to foreign countries, without regard to whether or not the exportation involves a commercial transaction. In general, the statistics record the physical movement of merchandise out of the United States to foreign countries, with the exception of the following types of transactions:

1. All shipments from U.S. possessions, regardless of whether the shipments are sent to the United States, to other U.S. possessions, or to foreign countries.
2. Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.
3. Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

Source of Export Information

The official U.S. export statistics are compiled by the Bureau of the Census primarily from copies of Shipper's Export Declarations. Exporters are required to file Shipper's Export Declarations with Customs officials. The only exceptions are those exporters who have been authorized to submit data directly to the Bureau of Census on magnetic tape, punched cards, or monthly Shipper's Summary Export Declarations.

Country and Area of Destination

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

Note 2: Supply

The components of petroleum supply are field production, refinery production, imports, and stock withdrawal or addition:

Field Production is the sum of crude oil production (including lease condensate), natural gas processing plant production, and new supply (field production) of other liquids used by refineries.

Crude oil production is estimated based on data received from State conservation and revenue agencies. For further explanation, see Explanatory Note 3.

Field production of natural gas plant liquids (NGPL), including finished petroleum products, is reported monthly on survey Form EIA-816, *Monthly Natural Gas Liquids Report*. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. For survey description and other detail, see Explanatory Note 1.2.

Refinery Production of LRGs, ethane, and finished petroleum products is reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published production of these products equals refinery production minus refinery input. Refinery production of unfinished oils and of motor and aviation gasoline blending components appears on a net basis under refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. It should also be noted that refineries do not export production of crude oil, natural gasoline, isopentane, unfractionated stream, plant condensate, or other hydrocarbons.

Imports of crude oil and petroleum products are reported monthly on Form ERA-60, *Report of Oil Imports into the United States and Puerto Rico*, and Form EIA-815, *Shipments of Refined Products (Including Unfinished Oils) from Puerto Rico to the United States*. In addition, the Census Bureau Tabulation IM-145 summarizes import data from Customs import declarations reported on Customs Forms 7501 and 7505. The most prominent difference between the EIA and Census systems appears in imports of liquefied petroleum gases

(LPG), where the Census data show a much higher level of imports than EIA data. This occurs because the ERA-60 respondent frame was built by monitoring importers of licensed products and LPGs are not licensed products. Therefore, respondents that import only LPGs have not been identified, and do not report these imports to the Department of Energy. Since these importers are required to file form 7501 with the U.S. Customs Service, EIA obtains data on imports of LPGs from Census Tabulation IM-145. Additional data taken from the IM-145 are relatively small quantities of naphtha- and kerosene-type jet fuels, distillate fuel oils, and residual fuel oils withdrawn from bonded storage for use in international trade and for military offshore use. Even though these duty-free fuels are stored on United States shores, they did not enter the United States for domestic consumption and therefore are not included in the ERA-60 reporting system.

Stock Withdrawal (+) or Addition (-) is calculated by subtracting stocks at the end of the month from stocks at the beginning of the same month. (Note: The beginning stocks of one month are equal to the ending stocks of the previous month.) A positive result (+) would represent a withdrawal from stocks and an increase in petroleum supplies distributed for domestic consumption. A negative result (-) would represent a buildup of stocks and a reduction in the amount of petroleum supplies distributed for domestic consumption. For a description of survey forms used to make stock withdrawal or addition calculations see Explanatory Note 5.

Unaccounted-for Crude Oil is a balancing item that represents the difference between crude oil supply and disposition.

Crude oil supply is the sum of field production, imports and stock withdrawals or additions. Crude oil disposition is the sum of exports, refinery input, losses and product supplied. Unaccounted-for crude oil is calculated by subtracting crude oil supplies from crude oil disposition. A positive result indicates that refiners and exporters reported use of more crude oil than was reported to have been available to them. (This occurs, for example, when imports are undercounted due to late reporting or other problems.) A negative result would indicate that more crude oil was reported to have been supplied to refiners and exporters than they reported used.

Note 3: Domestic Crude Oil Production

Data for the Crude Oil Production System (COPS) are reported to the Department of Energy by each of the State conservation agencies, which collect crude oil production values for tax purposes. The U.S. Geological Survey reports the volume of crude oil that is produced offshore in Federally-owned waters. With the exception of ten State conservation agencies, all of these reports are received monthly. After each calendar year, these monthly numbers are updated using the annual reports

from the State conservation agencies and the U.S. Geological Survey. The ten States that do not report monthly values are Indiana, Kentucky, Missouri, Arkansas, Utah, New York, Ohio, Pennsylvania, West Virginia, and Wyoming. Monthly values are estimated for these States using the individual linear trends of their historical annual crude oil production values.

There is a time lag of approximately 4 months between the end of the reporting month and the time when the monthly COPS information becomes available. Table 11 of this publication provides information on crude oil production for the most recent month for which COPS values are available. In order to present more timely crude oil production values, the EIA's Dallas Field Office prepares a series of State level estimates which are based on historical production patterns and are summed to obtain the monthly crude oil production values shown in the summary statistics of this publication.

The individual State level estimates are either exponential curve fitted projections based on recent data or are constant level projections based on the average production rate during a recent time period. In some cases, adjustments are made to these estimates based on additional information on expected changes in production rates supplied by a State agency, a trade association, or an individual field operator.

Note 4: Disposition

The components of petroleum disposition are crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

Crude Oil Losses is the sum of crude oil losses at refineries. Crude oil losses at refineries are reported on Form EIA-810, *Refinery Report*.

Refinery inputs of crude oil, natural gas plant liquids, and other liquids are reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published inputs of unfinished oils and of motor and aviation gasoline blending components equal refinery input minus refinery output. Refinery inputs of finished petroleum products are reported on a net basis under refinery production.

Exports of crude oil and petroleum products are compiled from Census Bureau tabulations EM-522 and EM-594. Exports include crude oil shipments to Puerto Rico, the Virgin Islands, and the Hawaiian Foreign Trade Zone, which are obtained from refinery receipts reported on Form EIA-810, by refineries located in these places.

Product supplied for each product is calculated by summing field production plus refinery production, plus imports, plus stock withdrawal or minus stock addition, minus crude oil losses (plus net receipts when calculated on a PAD District basis), minus re-

finery input, minus exports. This formula ensures that total disposition equals total supply.

Products supplied indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of that product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported, (2) data were misreported or reported late, (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of interdistrict movements was incomplete.

Product supplied for crude oil is the sum of crude oil burned on leases and by pipelines as fuel oil. These data are reported on EIA-813, *Monthly Crude Oil Report*. Prior to January 1983, crude oil burned on leases and by pipelines as fuel oil were reported as either distillate or residual fuel oil and included in product supplied for these products.

Note 5: Stocks

Primary stocks of crude oil are the sum of ending stocks reported monthly on Form EIA-810, *Monthly Refinery Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Crude oil held in the Strategic Petroleum Reserve is included unless otherwise noted. Alaskan crude oil in transit is also included. Stocks of crude oil are also reported weekly on Form EIA-800, *Weekly Refinery Report*, and on Form EIA-803, *Weekly Crude Oil Stocks Report*. Primary stocks of petroleum products are summed from data reported on Form EIA-816, *Monthly Natural Gas Liquids Report*, Form EIA-811, *Monthly Bulk Terminal Report*, and on Form EIA-812, *Monthly Product Pipeline Report*. Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or stocks held by consumers. Petroleum product stocks are also reported weekly on Form EIA-800, *Weekly Refinery Report*, Form EIA-801, *Weekly Bulk Terminal Report*, and Form EIA-802, *Weekly Crude Oil Stocks Report*. For survey descriptions and other details, see Explanatory Notes 1.1 - 1.3.

Note 6: Average Stock Levels

The graphs displaying monthly stock levels of crude oil, motor gasoline, distillate fuel oil, residual fuel oil, liquefied petroleum gases, and other products provide the user with recent data as well as a summary of data from January through December or from July through June for the most recent 3-year period. This summary takes the form of an *average range* that includes seasonal variation determined from a longer time period. The

average range represents the historical pattern; it is not a forecast.

These curves are updated semiannually (on April 1 and October 1), by basing the *average ranges* on a more recent time period. Each 3-year data series is adjusted by dropping the first 6 months and including the most recent 6 months.

For each data series, the monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of the Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive. The series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported stock levels. The intent of deseasonalization is to remove only seasonal variation from the data. Thus, a deseasonalized series would contain the same trends and irregularities as the original data. For crude oil stocks, the derived seasonal factors are very small relative to crude oil stock levels. Therefore, the seasonal factors for distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products are derived using monthly data from 1974-1980. For motor gasoline, the seasonal factors are based on monthly data from 1975, 1976, 1978, 1979 and 1980. In 1977, there was virtually no seasonal behavior in motor gasoline stocks. Monthly stock levels stayed at the same high level for the entire year. In addition, the seasonal patterns in 1973, 1974 and 1977 were not representative of the recent past, and these years were not used in the determination of seasonal patterns for motor gasoline stocks. Because of these differences in the year-to-year seasonal fluctuation of motor gasoline, the evidence for the illustrated seasonal patterns for crude oil, distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products is stronger than is the evidence for the illustrated seasonal patterns for motor gasoline.

In some cases, these seasonal patterns do not show a smooth transition from month to month. For example, the June factor for residual fuel oil is slightly less than the May and July values, making a bump in the curve. As there is little difference in the magnitude of these seasonal factors, it is possible that this variation is due to the small number of observations (7 years) and the data variability.

After seasonal factors are derived, the most recent 3-year period (from January through December or from July through June) is deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard error of the deseasonalized 36 months is calculated adjusting for extreme data points. The width of the *average range* is twice this standard error.

The upper curve of the *average range* is defined as the average plus the seasonal factors plus the standard error. The lower curve is defined as the average plus the seasonal factors minus the standard error.

Note 7: Movements

Movements of crude oil between PAD Districts are reported on Form EIA-817, *Monthly Tanker and Barge Movement Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Petroleum product movements are reported on Forms EIA-817 and EIA-812, *Monthly Product Pipeline Report*. Net receipts is the difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge. For survey descriptions and other detail, see Explanatory Note 1.2.

Note 8: Preliminary Monthly Statistics

Weekly data (Forms EIA-800, 801, 802, 803, and 804) are used to estimate the most recent monthly values for the *Summary Statistics* section. Since some of the weekly reporting periods overlap two adjacent months, it is necessary to use weighting factors in the calculation of the monthly values.

To estimate crude oil and petroleum product imports, crude oil input to refineries and production of petroleum products for a specific month, the weekly estimates are weighted by the number of days of that month included in each week, then summed.

End-of-month stock levels of crude oil and the major products (motor gasoline, distillate fuel oil, and residual fuel oil) are calculated in a similar manner, but use only the two weekly reporting periods that cover the end-of-week stocks before and after the end of the month. The end-of-month stock level is calculated by first calculating the stock change between the two weeks. The daily stock change between the two end-of-week stock levels is then calculated. This number is multiplied by the weighting factor of the earlier of the two weeks (the week that covers the last day of the month of interest). This change is added to the earlier of the two end-of-week stock levels to estimate the end-of-month stock level.

Preliminary monthly estimates of domestic crude oil production are calculated as described in Explanatory Note 3.

Note 9: Notes on Tables

Note 9.1 Crude Oil and Petroleum Products Overview statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Crude Oil and Petroleum Products Stock Withdrawal (+) or Addition (-), Petroleum Products Supplied, Total Imports, Crude Oil Imports, Total Exports, and Crude Oil Exports appear as labeled in Table 4. Total Production and Crude Oil Production appear under Field Production in Table 4.

- Natural Gas Plant Production is the sum of Natural Gas Liquids and Finished Petroleum Products Field Production in Table 4.

- Petroleum Products Imports is the sum of Natural Gas Liquids and LRGs, Other Liquids, and Finished Petroleum Products Imports in Table 4.

- Total Crude Oil and Petroleum Products Ending Stocks appear in thousands of barrels in Table 2.

Note 9.2 Crude Oil Supply and Disposition statistics on the referenced line appear in Table 1 of the Detailed Statistics, except where noted.

- Total Domestic Field Production, Alaskan Field Production, SPR Imports, Other Imports (synonymous with Imports Gross Excl. SPR), SPR and Other Primary Stocks Withdrawal (+) or Addition (-), Unaccounted For Crude Oil, Refinery Inputs, and Exports appear as labeled in Table 1.

- Crude losses and Product Supplied appear as labeled in Table 4.

- SPR Ending Stocks and Other Primary Ending Stocks (synonymous with stocks excluding SPR) appear in thousands of barrels in Table 1.

- Total Crude Oil Ending Stocks appear in thousands of barrels in Table 2.

- Total Imports appear in Table 4.

Note 9.3 Finished Motor Gasoline Supply and Disposition statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Unleaded Percent of Total Product Supplied represents the ratio of finished unleaded motor gasoline product supplied to total finished motor gasoline product supplied, multiplied by 100 and rounded to the nearest tenth.

- Ending Stocks appear in thousands of barrels in Table 2.

Note 9.4 Distillate and Residual Fuel Oil Supply and Disposition statistics on the referenced lines appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Ending Stocks appear in thousands of barrels in Table 2.

Note 9.5 Liquefied Petroleum Gases Supply and Disposition statistics represent the aggregation of statistics on ethane, propane, butane, butane-propane mixtures, ethane-propane mixtures, and isobutane. The statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stocks Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied appear as labeled in Table 4.

- Ending stocks appear in thousands of barrels in Table 2.

Note 9.6 Other Petroleum Products Supply and Disposition statistics represent the aggregation of statistics on natural gasoline, isopentane, unfractionated stream, plant condensate, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, and residual fuel oil. The statistics on the referenced line are aggregated from Table 4 of the Detailed Statistics, except where noted.

- Total Production is the aggregated sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied are aggregated from Table 4.

- Ending stocks are aggregated from ending stocks in thousands of barrels in Table 2.

Note 9.7 Table 1. U.S. Petroleum Balance

- Lines (1) through (3): Crude oil (including lease condensate) production for *Alaska*, *Lower 48 States*, and *Total U.S.* are calculated by calling the conservation agency in Alaska for Alaskan crude oil production during the month, estimating crude oil production in the United States (see Explanatory Note 3), and taking the difference to equal production in the Lower 48 States.

- Line (5): *SPR Imports* are reported on Survey Form ERA-60.

- Line (12): *Total Other Sources* equals crude oil stock withdrawal (+) or addition (-) plus unaccounted for crude oil minus crude losses in Table 2.

- Line (14): Natural gas plant liquids (NGPL) *Production* equals field production of natural gas liquids (NGL) plus field production of finished petroleum products in Table 2.

- Line (15): *NGPL Imports* equals the sum of the im-

ports of natural gasoline and isopentane, unfractionated stream, and plant condensate imports in Table 2.

- Line (16): *NGPL Stock Withdrawal (+) or Addition (-)* is equal to the sum of stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate in Table 2.

- Line (17) equals the sum of lines (14), (15), and (16).

- Line (18): Unfinished oils and gasoline blending components *Stock Withdrawal (+) or Addition (-)* equals stock withdrawal (+) or addition (-) for other hydrocarbons and alcohol, for unfinished oils, motor gasoline blending components, and aviation gasoline blending components.

- Line (20): *Other Hydrocarbons and Alcohol New Supply* equals the field production of same in Table 2.

- Line (21): *Refinery Processing Gain* is a balancing item equal to total refinery production minus total refinery input in Table 2.

- Line (23): *Total Other Liquids* equals the sum of lines (18) through (22).

- Line (24): *Total Production of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; plus crude oil product supplied in Table 2.

- Line (25): *Gross Imports of Refined Products* equals imports of LPG plus imports of finished petroleum products in Table 2.

- Line (26): *Exports of Refined Products* equals exports of LPG plus exports of finished petroleum products in Table 2.

- Line (27): *Net Imports of Refined Products* equals the difference between lines (25) and (26).

- Line (28): *Total New Supply of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; minus crude oil product supplied plus imports of LPG and finished petroleum products; minus exports of LPG and finished petroleum products in Table 2.

- Line (29): *Refined Products Stocks Withdrawal (+) or Addition (-)* equals the sum of stock withdrawal (+) or addition (-) for LPG and finished petroleum products in Table 2.

- Line (30): *Total Petroleum Products Supplied for Domestic Use* equals total products supplied in Table 2.

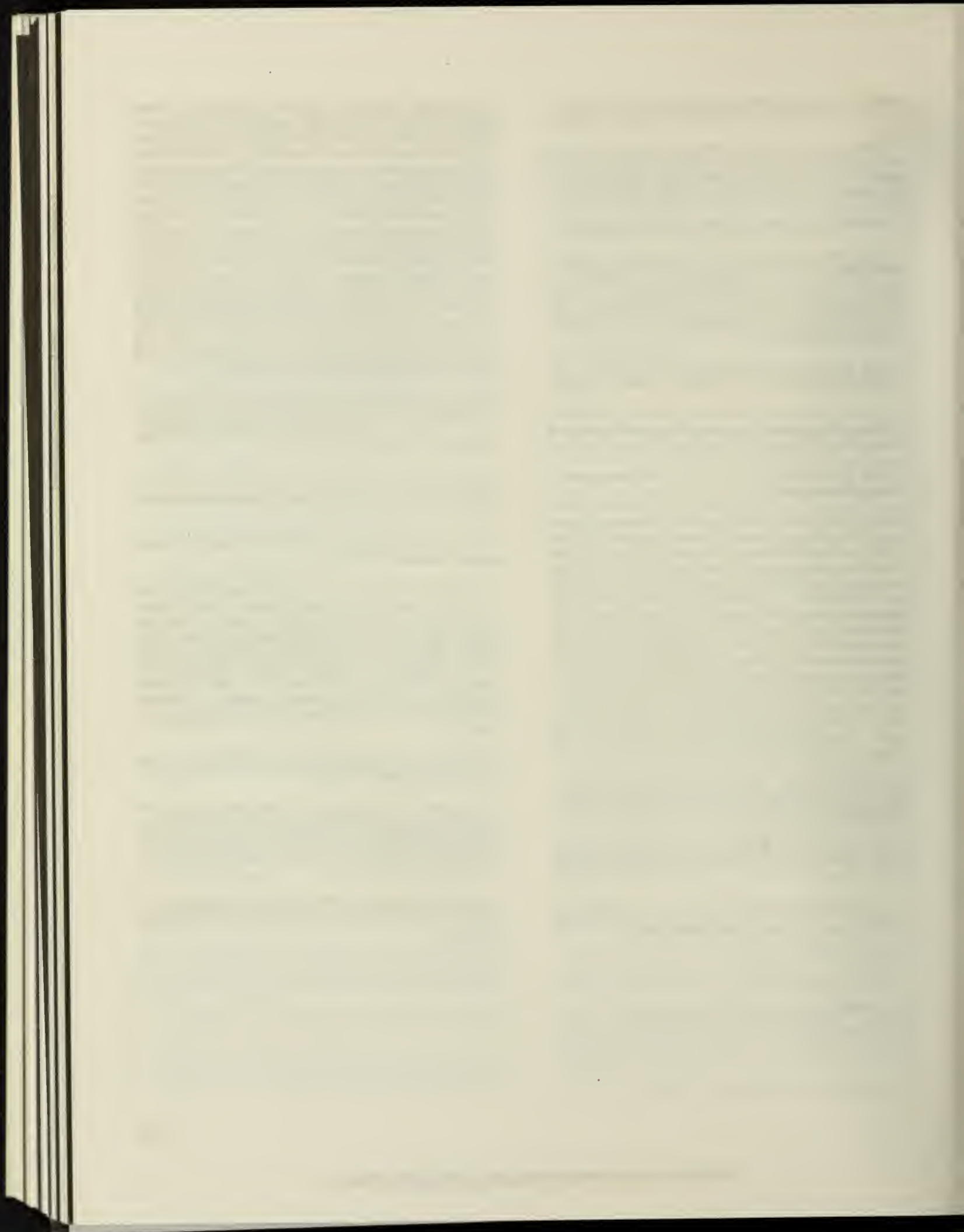
- Lines (31) through (35) equal the respective products supplied in Table 2.

- Line (36): *Other Products Supplied* equals the sum of natural gasoline and isopentane, unfractionated stream, plant condensate, aviation gasoline, naphtha < 400 Deg. F for petrochemical feedstock use, other oils > 400 Deg. F. for petrochemical feedstock use, special naphthas, lubricants, waxes, coke, asphalt, road oil, still gas, unfinished oils, motor gasoline blending components, aviation gasoline blending components and miscellaneous products supplied in Table 2.

- Line (37): *Total Product Supplied* is equal to total products supplied in Table 2.

- The sum of lines (38) and (39), stocks of *Crude Oil and Lease Condensate (Excluding SPR)* and stocks held by the *Strategic Petroleum Reserve*, equals ending stocks of crude oil in Table 2. SPR stocks are reported on Form EIA-813.

- Line (43): stocks of *Refined Products*, equals the sum of LPG and finished petroleum product stocks in Table 2.



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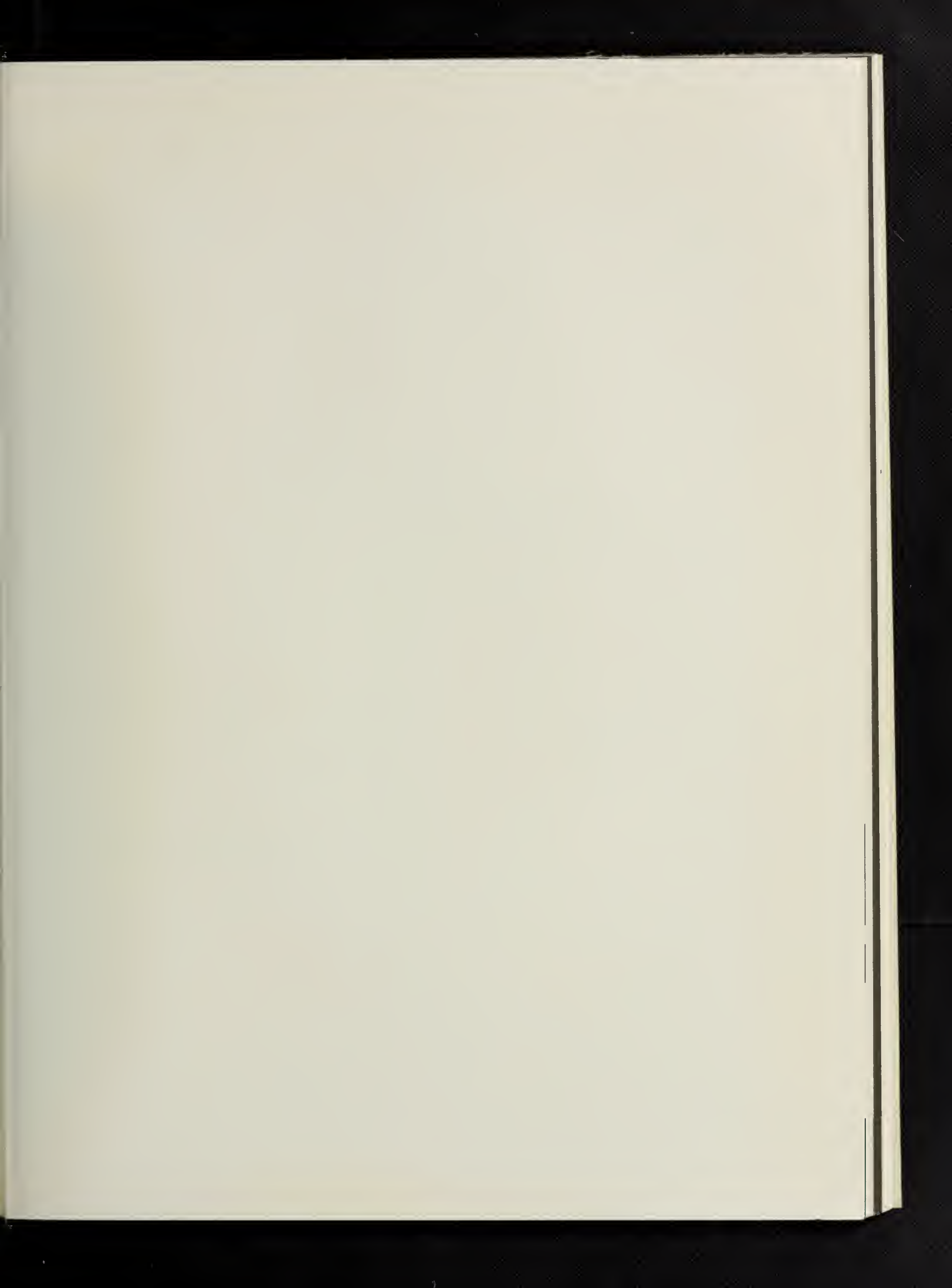
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Petroleum Supply Monthly



June 1983



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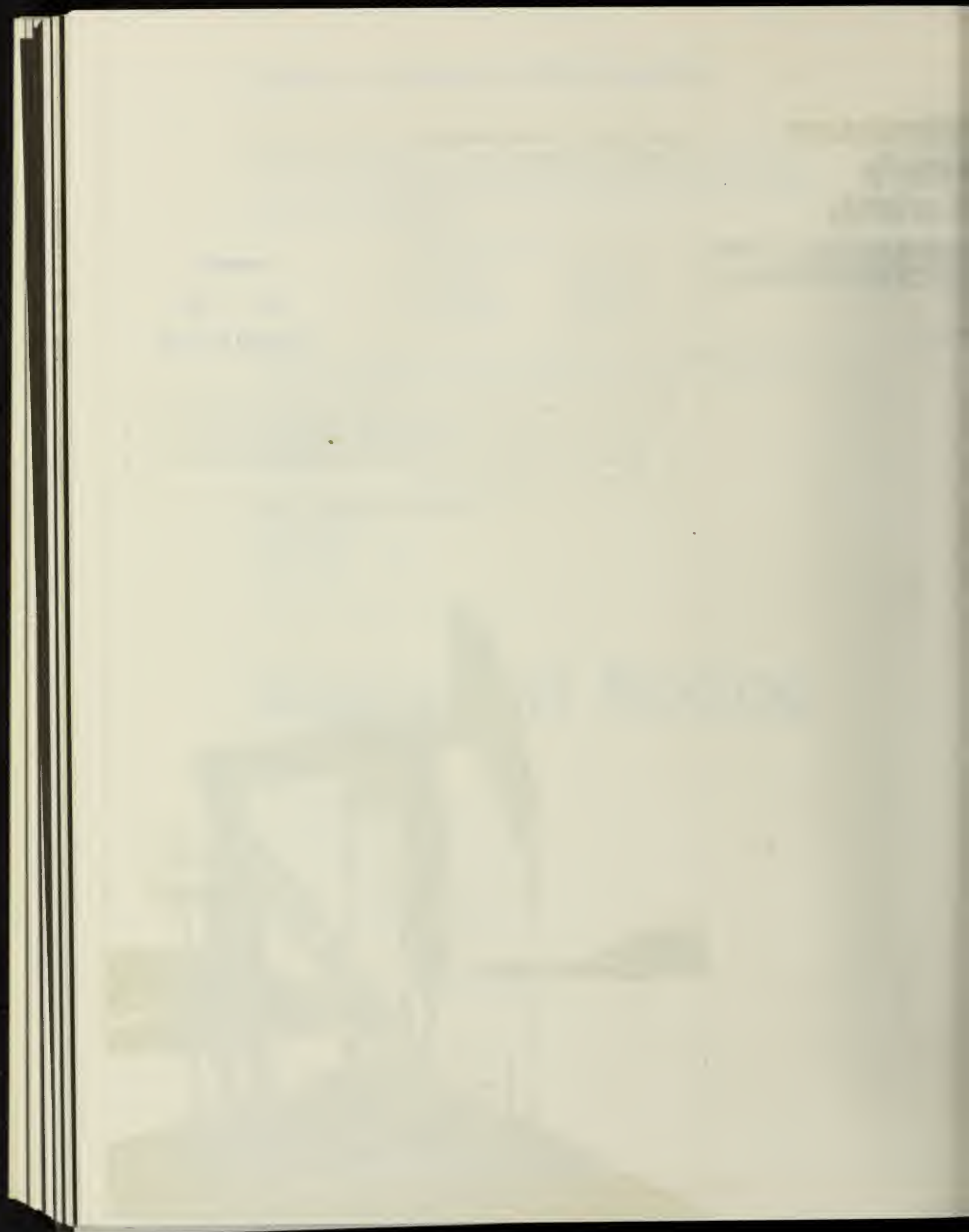
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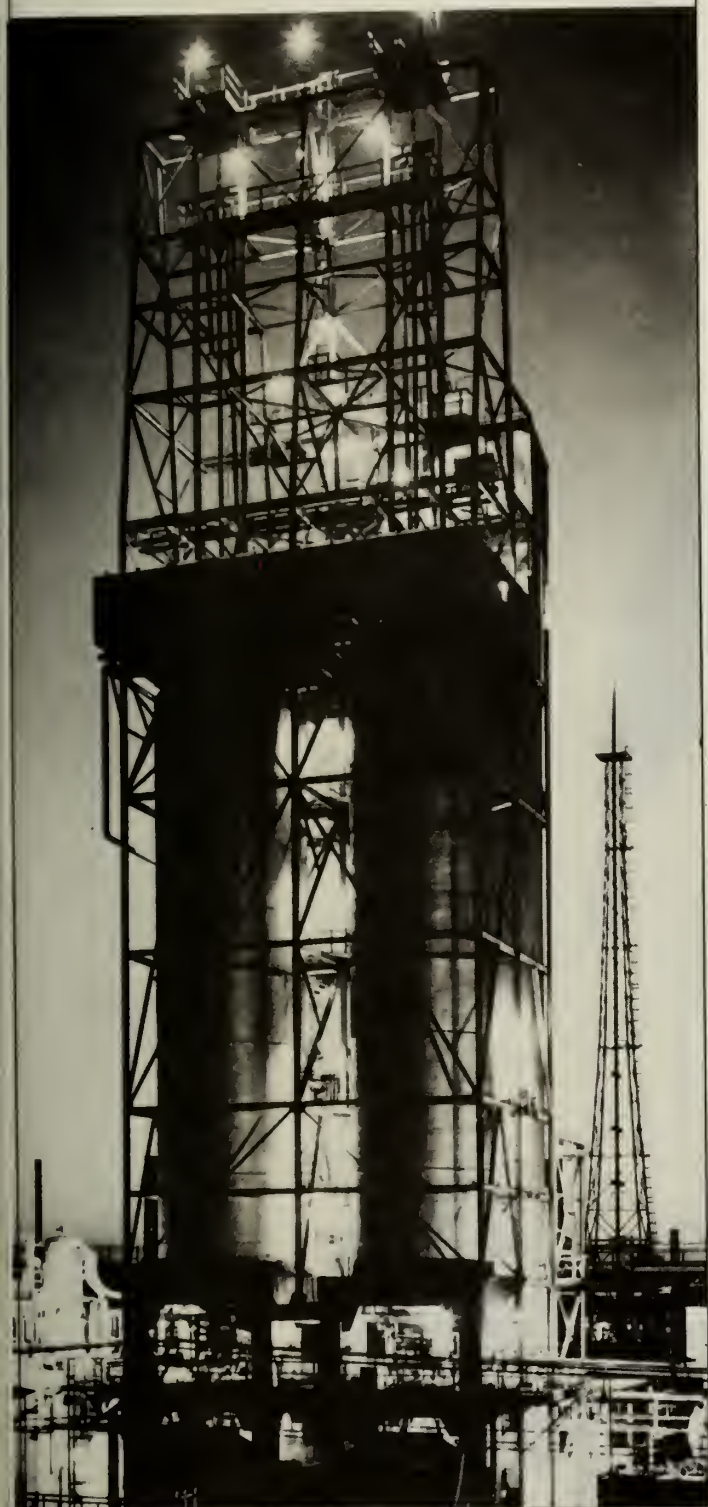




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This issue of the Petroleum Supply Monthly features an article concerning petroleum industry trends and outlook. *U.S. Petroleum Refinery Trends and Outlook* can be found on page 5.



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Petroleum Focus





Petroleum Supply Summary

Average Volume for Period (Million Barrels Per Day)	May			Cumulative January Through May		
	1983	1982	% Change	1983	1982	% Change
Total Product Supplied	14.7	14.8	- 0.7	14.9	15.6	- 4.7
Motor Gasoline	6.7	6.7	1.1	6.4	6.4	- 0.2
Distillate Fuel Oil	2.3	2.4	- 4.3	2.7	3.0	- 9.2
Residual Fuel Oil	1.3	1.6	- 14.0	1.5	1.9	- 23.8
Crude Inputs to Refineries	11.9	11.8	0.5	11.2	11.5	- 2.6
Crude Oil and Natural Gas Liquids Production	10.2	10.2	0.04	10.2	10.2	0.2
Net Imports ¹	4.2	4.0	5.4	3.4	3.9	- 11.1
Net Crude Oil Imports ²	3.1	2.8	8.3	2.5	2.7	- 8.5
SPR Imports	0.3	0.2	35.8	0.2	0.2	20.9
Net Product Imports	0.8	0.9	- 10.3	0.8	1.0	- 23.5
Crude Oil Stock Withdrawal ²	0.20	0.22	—	- 0.06	0.13	—
Product Stock Withdrawal	- 0.31	- 0.03	—	0.74	0.99	—
Stocks at End of Period (Million Barrels)						
Crude Oil ²	359	348	NM			
Motor Gasoline ³	220	215	NM			
Distillate Fuel Oil	107	114	NM			
Residual Fuel Oil	49	59	NM			
Total Product	702	740	NM			
SPR	327	261	NM			
Total	1,388	1,349	NM			

¹Gross imports of crude oil including Strategic Petroleum Reserve (SPR) and petroleum products less exports of crude oil and petroleum products.

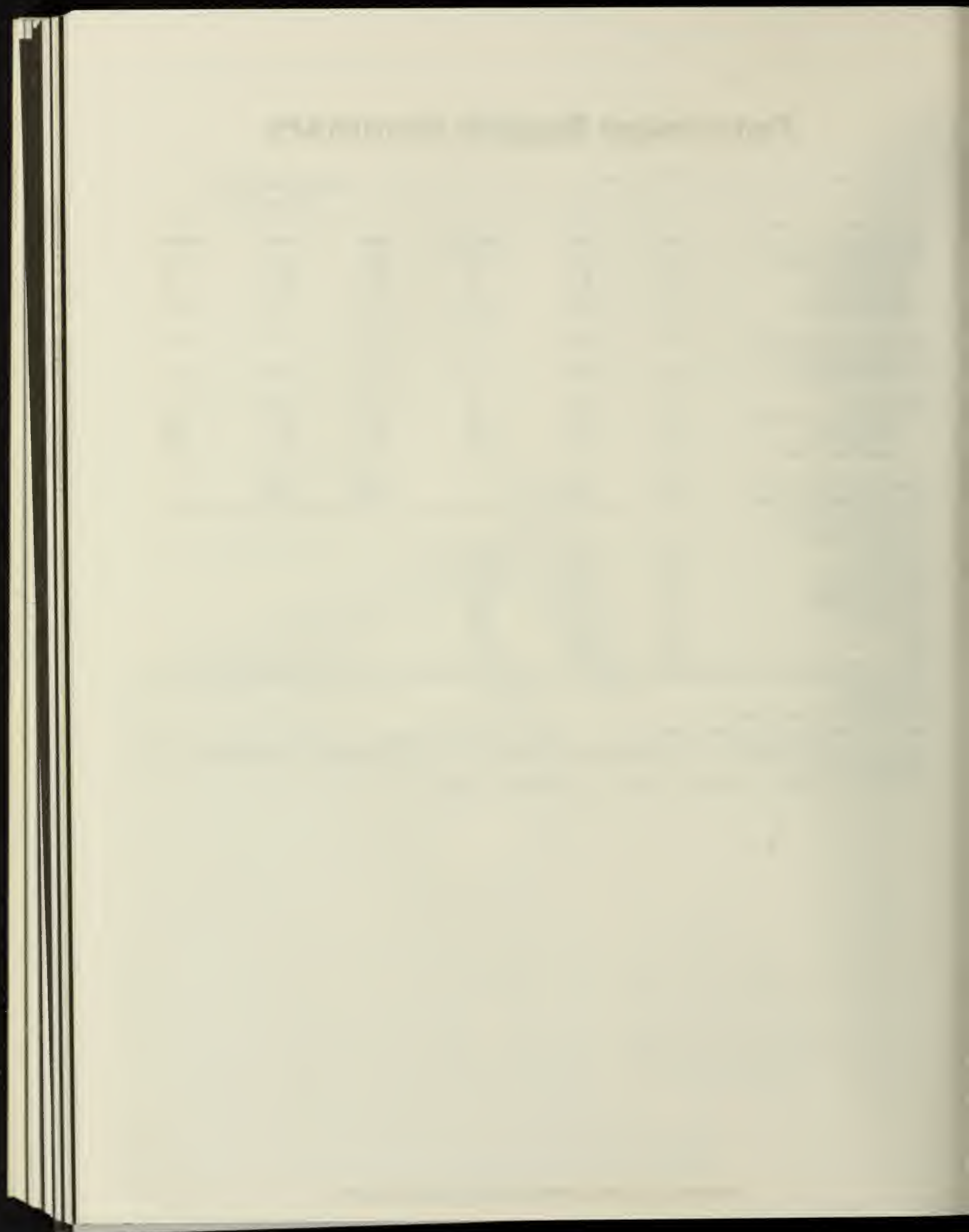
²Excluding SPR.

³Including blending components.

NM = Not meaningful due to new stock basis.

Note: Percent changes are based on unrounded values. May 1983 data are estimates based on weekly data, except for export and Natural Gas Liquids Production estimates which are April 1983 monthly values. Totals may not be equal to sum of components due to independent rounding.

Source: Energy Information Administration, *Petroleum Supply Monthly*, June 1983.



U.S. Petroleum Refinery Trends and Outlook

Substantial and significant changes have occurred in the U.S. petroleum refining industry during recent years. By January 1, 1983, refiners had closed over one-fifth of the record high 324 refineries operable on January 1, 1981, and reduced crude oil distillation capacity by 1.8 million barrels per calendar day (MMB/CD) (see Table 1). Over the same 2-year period, refinery output mix shifted from heavier products (such as residual fuel oil) toward lighter products (such as gasoline), while crude oil inputs to refineries shifted in the opposite direction, toward a lower gravity and a higher sulfur content. This article discusses the principal factors associated with these changes and the near term outlook for petroleum refining.

Petroleum Refining Capacity

Crude oil distillation capacity as of January 1 increased each year beginning in 1966 to a record high of 18.6 MMB/CD in 1981 and declined in 1982 and 1983. The recently completed annual survey of the U.S. petroleum refining industry shows that crude oil distillation capacity of operable refineries on January 1, 1983, totaled 16.9 MMB/CD, 1.0 MMB/CD below the comparable January 1, 1982, level, and 1.8 MMB/CD below the record January 1, 1981, level. Of the January 1, 1983, total operable crude oil distillation capacity, 1.9 MMB/CD was idle. Most of this idle capacity (1.1 MMB/CD) was at facilities that were partially in operation. The remainder (0.8 MMB/CD) was at 25 refineries that were totally idle, but capable of being restarted within 30 days or under repairs that could be completed within 90 days.¹

Trends in crude oil distillation capacity and the number of operable refineries were affected by reduced demand for petroleum products ("demand" is identified in EIA publications as "products supplied"), crude oil pricing shocks initiated by the Organization of Petroleum Exporting Countries² (OPEC), and changing U.S. regulations. Following the 1973-1974 embargo, imported crude oil average prices to U.S. refiners increased from \$4.08 per barrel in 1973 to a record \$37.05 per barrel in 1981.³ During this period, the Federal Government controlled prices for domestic crude oil and began a Crude Oil Entitlements Program that created incentives for the construction of small refineries. These actions reduced some of the impact of the price shocks. Decontrol of domestic oil prices and the end of

NOTE: The statistics which appear in this article were obtained from the 1982 Petroleum Supply Annual (except where noted) and are final. They may conflict with 1982 preliminary data in the Summary Statistics section of this publication which begins on page 10. The Summary Statistics section will be updated with final 1982 data in next month's issue.

the entitlement program occurred early in 1981. Energy conservation, automotive fuel efficiency improvements, low levels of industrial activity, and high prices contributed to the lowest level of petroleum demand in over a decade, 15.3 million barrels per day (MMBD) for 1982.⁴ In this environment, refiners elected to shut down some refineries and reduce total crude oil distillation capacity (see Table 1).

There were 258 operable refineries on January 1, 1983, substantially fewer than the record number operable in 1981 (see Figure 1). Eighty-eight percent of the refineries shut down during 1981 and 1982 had a capacity of 30,000 barrels per calendar day (B/CD) or less, and 54 percent of the shutdowns had a crude oil distillation capacity of 10,000 B/CD, or less. Only four of the shutdown refineries had a capacity greater than 100,000 barrels per day⁵. The largest refinery shutdown was the Dow Chemical U.S.A. refinery in Freeport, Texas, which had a capacity of 190,000 barrels per day and had only been in operation for 1 year. The reduction in the number of smaller refineries was particularly related to the elimination of the Crude Oil Entitlements Program that favored small refiners.

During 1981 and 1982 the 10 largest refiners reduced the number of refineries they operated from 75 to 65. The shutdowns resulted in a 13-percent reduction in the number of their refineries but only a 9-percent reduction in their crude oil distillation capacity (including reductions in capacity for some refineries that continued operating). These reductions can be compared to total reductions of 21 percent in the number of refineries shut down but only 7 percent of total crude oil distillation capacity.⁶

Petroleum Administration for Defense (PAD) Districts I (East Coast) and II (Midwest) lost respectively 19 and 17 percent of their January 1, 1981 crude oil distillation capacity during 1981 and 1982. PAD District V (West

¹Crude oil distillation capacity data and information concerning refinery operability as of January 1, 1983, are published in EIA's *Petroleum Supply Annual, 1982* DOE/EIA-0340 (82/1) (Washington, D.C., 1983). See Refinery Capacity Table 1 of that publication. Previous years' data are taken from EIA's *Petroleum Supply Annual, 1981*, *Petroleum Refineries in the United States and U.S. Territories*, DOE/EIA-0111 (81) and earlier issues. Prior to 1978, the petroleum refineries report was published by the U.S. Bureau of Mines.

²Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

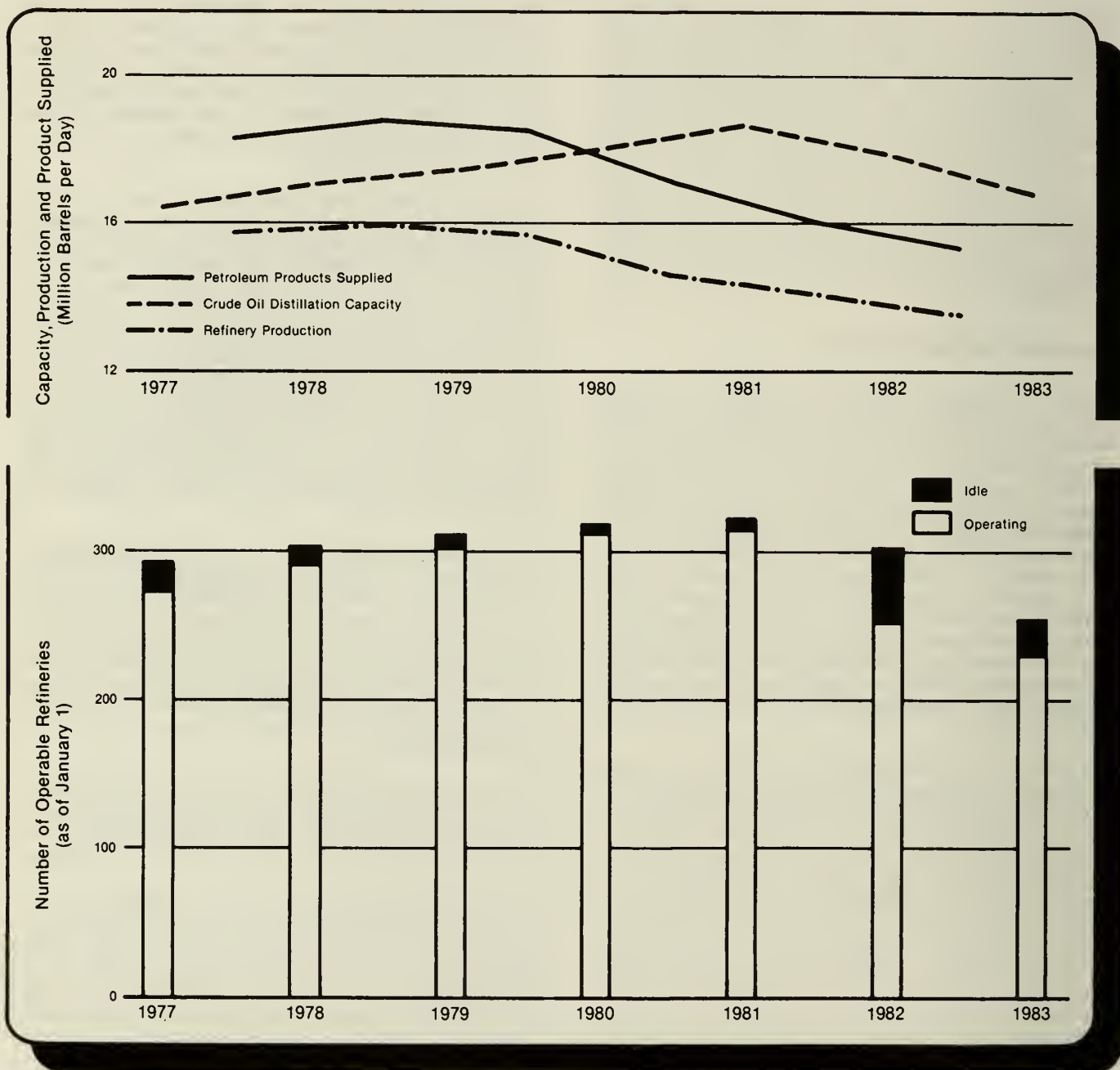
³Energy Information Administration, *1982 Annual Energy Review*, DOE/EIA-0384 (82) (Washington, D.C., 1983) Table 41, p. 91.

⁴Energy Information Administration, *Petroleum Supply Monthly*, DOE/EIA-0109 (83/06) (Washington, D.C., 1983) p. 10.

⁵*Petroleum Supply Annual, 1982*, Refinery Capacity Table 10.

⁶*Petroleum Supply Annual, 1982*, Refinery Capacity Table 4 and *Petroleum Supply Annual, 1981*, Refinery Capacity Table 4.

Figure 1. Operable Refineries, Crude Oil Distillation Capacity, Refinery Production and Products Supplied



Note: Number of operable refineries and capacity data are as of January 1. Petroleum product supplied and refinery production are yearly averages.

Source: Energy Information Administration, *Petroleum Supply Annual*, 1982, and predecessor reports.

Table 1. Refinery Capacities on January 1, 1981, 1982, and 1983

	Operable Refineries		Crude Distillation Capacity (Thousand Barrels per Calendar Day)			Charge Capacity (Thousand Barrels per Stream Day)					
	Total	Oper- ating	Total	Oper- ating	Vacuum Distillation	Thermal Operation	Catalytic Cracking		Catalytic Reform- ing	Catalytic Hydro- cracking	Catalytic Hydro- treating ¹
							(Fresh)	(Recycle)			
1981	324	315	18,620	18,051	7,033	1,587	5,543	594	4,098	909	8,487
1982	301	254	17,890	16,104	7,197	1,782	5,473	562	3,966	892	8,539
1983	258	233	16,859	14,961	7,180	1,715	5,402	488	3,918	883	8,354

¹Includes Catalytic Hydrorefining.

Sources: Energy Information Administration, *Petroleum Supply Annual, 1981 and 1982*, and *Petroleum Refineries in the United States and U.S. Territories*, January 1, 1981.

Coast) and PAD District III (Gulf Coast) losses were the smallest, 2 percent and 6 percent, respectively. PAD District IV (Rocky Mountains) and the U.S. total declines were between 9 and 10 percent. In terms of actual capacity, the largest loss was in PAD District II, 0.7 MMB/CD. Substantial growths in their portions of the U.S. total crude oil distillation capacity occurred in PAD Districts III and V.

Changes in Product Outputs

U.S. refinery production equaled 88 percent of domestic petroleum demand in 1982, compared to 85 percent in 1978, despite the reduction in crude oil distillation capacity that has occurred since the beginning of 1981 (see Figure 1). The remaining domestic petroleum demand was met by net imports, finished products from natural gas plants, and product stocks drawdowns.

Although the demand for petroleum products declined from a record 18.8 MMB/D in 1978 to 15.3 MMB/D in 1982, the decline was not uniform for all products. There was an appreciable shift in demand toward lighter products and away from heavier products.⁷

In response to these demand shifts, refiners increased the proportion of downstream processing capability that could raise the yields of lighter products while decreasing their total capacity, as discussed earlier. From January 1, 1981, to January 1, 1983, downstream capability as a percentage of crude oil distillation capacity increased nearly 2 percentage points for catalytic cracking and 4 percentage points for catalytic hydrorefining and hydrotreating.⁸ The larger growth in catalytic hydrorefining and hydrotreating was to increase the flexibility to process lower gravity and higher sulfur crude oil feedstocks, and the growth in catalytic cracking was to increase yields of lighter products. The percentage increases resulted both from new construction of downstream capacity and the closing of many smaller refineries which had little downstream capacity.

Crude Oil Feedstocks

The sources and quality of crude oil inputs to refineries have changed significantly in recent years. For more than a decade, crude oil production in the United States has been virtually at capacity and domestic crude has had a lower average price than imported crudes. Thus,

imports were used principally to fill the gap between domestic crude oil supply and demand. Domestic crude oil accounted for 46 percent of crude oil inputs to refineries in 1978 and 72 percent of crude oil receipts by refineries in 1982.⁹

With the start up of the Trans Alaskan Pipeline System in 1977, production of crude oil from the North Slope of Alaska could be transported to the Lower-48 States. Crude oil produced from that area has a gravity of about 27° API and a sulfur content of about 1.0 percent (by weight).¹⁰ This gravity is lower and sulfur content higher than the U.S. averages. Thus, as North Slope production increased its share of U.S. crude oil supply, there was movement toward a lower average API gravity and also movement toward a higher average sulfur content, contributing to the need for more complex refining capability. During 1982, North Slope production was about one-fifth of the U.S. total.¹¹

Because of availability and price differentials between higher gravity, lower sulfur content crude oil and lower gravity, higher sulfur crude oils, it became more profitable in many instances to import more of the lower gravity, higher sulfur crudes.

Information collected recently by EIA indicates that the average sulfur content of crude oil inputs to refineries increased from 0.89 percent in 1981 to 0.91 percent in 1982. Concurrently, the average gravity declined from 33.8° to 33.1° API.¹²

⁷*Petroleum Supply Monthly*, Summary Statistics and Table 5; and Energy Information Administration, *Crude Petroleum, Petroleum Products, and Natural Gas Liquids: 1978*, DOE/EIA-0108/78, (Washington, D.C., 1979) Tables 1 and 2.

⁸*Petroleum Supply Annual, 1982*, Refinery Capacity Table 1; and *Petroleum Refineries in the United States and U.S. Territories* Table 1.

⁹*Petroleum Supply Annual, 1982*, Table 16, and *Crude Petroleum, Petroleum Products and Natural Gas Liquids: 1978*, Table 15.

¹⁰*International Petroleum Encyclopedia*, Vol. 12, (Tulsa, OK: The Petroleum Publishing Company, 1979) p. 311.

¹¹Energy Information Administration, *Monthly Energy Review* DOE/EIA-0035/83/05 (Washington, D.C., 1983) p. 34.

¹²EIA Form 87, "Refinery Report."

Outlook

Respondents to the EIA's annual refinery survey for 1983 project that crude oil distillation capacity on January 1, 1984 will be 17.5 million barrels per stream day (MMB/SD),¹³ a net decrease of 0.4 MMB/SD from the January 1, 1983, level. Most of this decrease is expected to result from the planned closing of seven refineries during 1983. Respondents projected net increases of 388 thousand barrels per stream day (MB/SD) in downstream capacity. The largest changes in downstream capability include a decline in vacuum distillation (155 MB/SD) and increases in catalytic hydrotreating (433 MB/SD), and thermal operations (83 MB/SD).¹⁴ The projected increase in catalytic hydrotreating is equal to almost 5 percent of the operable capacity on

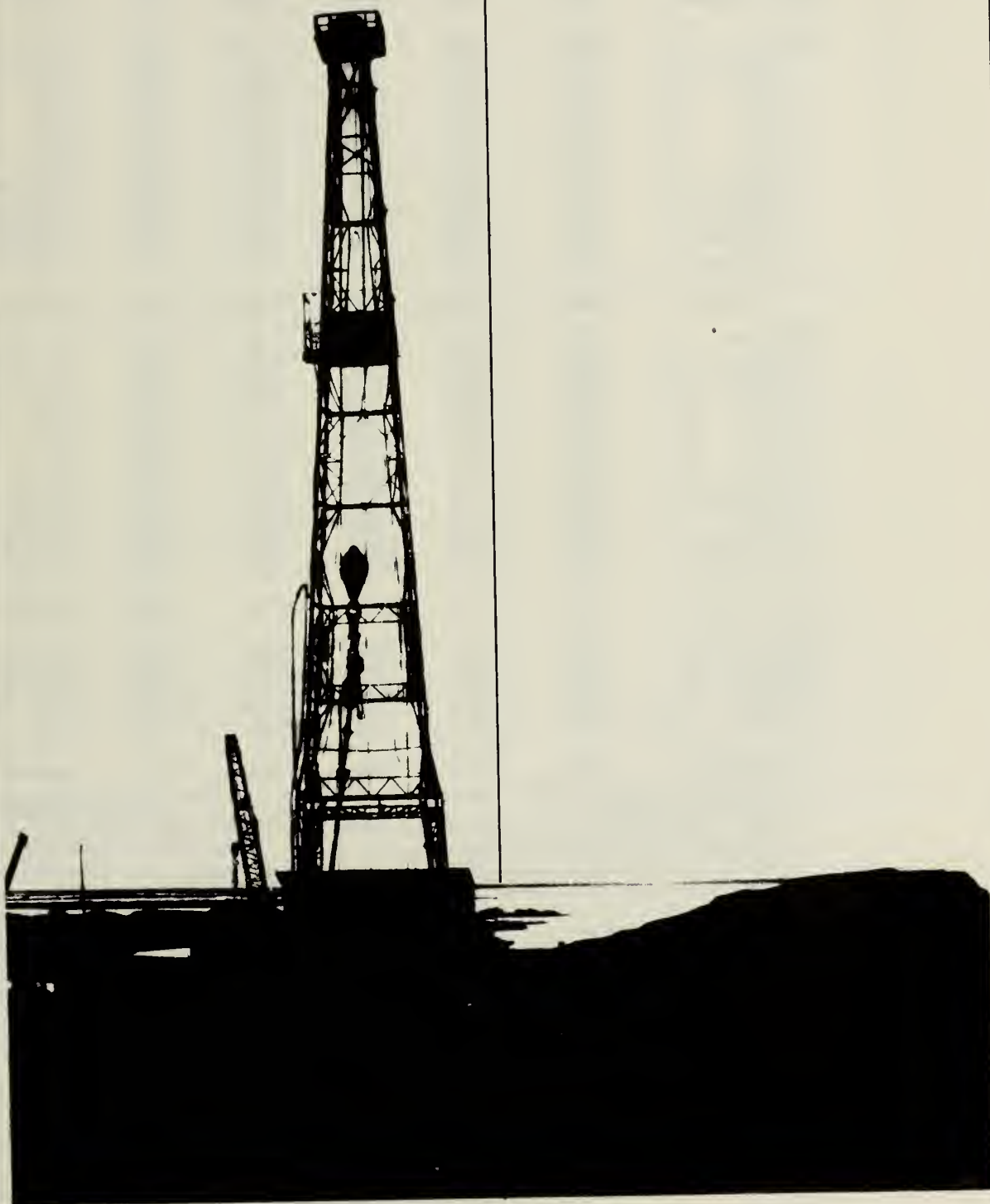
January 1, 1983. The addition of this downstream capability will provide the flexibility to process lower gravity, higher sulfur crude oil feedstocks into lighter products.

Although the number of operable refineries is expected to decrease, the shift toward more complex refining facilities begun several years ago is expected to continue. A number of refiners are upgrading downstream processing equipment to enable them to diversify product mixes and increase yields of lighter products.

¹³"Stream day" denotes an operating day on a refinery unit; "stream day" rates are about 6 percent higher than "calendar day" rates, because "calendar day" rates include downtime, see Glossary, this issue.

¹⁴*Petroleum Supply Annual 1982*, Refinery Capacity Table 8.

Summary Statistics



Crude Oil¹ and Petroleum Products Overview

		Field Production			Stock Withdrawal ²			Ending Stocks ³
		Total Domestic ⁴	Crude Oil	Natural Gas Plant Production	Crude Oil ⁵	Petroleum Products	Petroleum Products Supplied	Crude Oil ⁵ and Petroleum Products
Thousand Barrels per Day								Millions of Barrels
1973	AVERAGE	10,975	9,208	1,738	11	-146	17,308	1,008
1974	AVERAGE	10,498	8,774	1,688	-62	-117	16,653	⁶ 1,074
1975	AVERAGE	10,045	8,375	1,633	-17	-145	16,322	1,133
1976	AVERAGE	9,774	8,132	1,603	-39	96	17,461	1,112
1977	AVERAGE	9,913	8,245	1,618	-170	-378	18,431	1,312
1978	AVERAGE	10,328	8,707	1,567	-78	172	18,847	1,278
1979	AVERAGE	10,179	8,552	1,584	-148	-25	18,513	1,341
1980	AVERAGE	10,214	8,597	1,573	-98	-42	17,056	⁶ 1,392
1981	January	10,231	8,540	1,652	50	1,159	18,430	1,388
	February	10,294	8,604	1,653	-278	250	16,989	1,389
	March	10,272	8,613	1,624	-632	224	15,907	1,401
	April	10,195	8,557	1,599	-595	148	15,350	1,415
	May	10,160	8,501	1,593	-391	-374	15,353	1,438
	June	10,287	8,629	1,594	-135	406	16,095	1,430
	July	10,098	8,500	1,548	-360	91	15,682	1,439
	August	10,243	8,583	1,614	397	-999	15,263	1,457
	September	10,281	8,604	1,612	-285	-341	15,655	1,476
	October	10,225	8,563	1,598	-760	477	15,822	1,485
	November	10,269	8,586	1,630	-325	-233	15,593	1,501
	December	10,220	8,585	1,590	-170	745	16,596	1,484
	AVERAGE	10,230	8,572	1,609	-290	130	16,058	
1982	January	10,257	8,669	1,548	-236	1,129	15,890	1,461
	February	10,261	8,690	1,524	-216	1,268	15,941	1,431
	March	10,212	8,597	1,570	-65	1,049	15,560	1,401
	April	10,296	8,652	1,588	107	1,594	16,048	1,350
	May	10,223	8,660	1,520	49	-34	14,845	1,349
	June	10,242	8,681	1,505	86	-515	14,931	1,362
	July	10,228	8,649	1,521	-155	-865	14,771	1,394
	August	10,301	8,701	1,543	-440	4	14,838	1,407
	September	10,306	8,733	1,513	252	-489	14,921	1,415
	October	10,283	8,676	1,540	-564	-55	14,820	1,434
	November	10,377	8,690	1,634	-357	-357	15,031	1,455
	December	10,348	8,660	1,638	143	703	15,508	⁶ 1,429
	AVERAGE	10,278	8,671	1,554	-117	280	15,253	
1983	January	10,356	8,634	1,668	-567	865	14,765	1,453
	February	10,298	8,660	1,585	-382	1,128	14,772	1,432
	March	10,259	8,677	1,544	56	1,765	15,484	1,375
	April*	10,229	R 8,686	1,502	R -438	R 431	R 14,779	R 1,376
	May**	NA	8,682	NA	-81	-309	14,738	1,388
	AVERAGE	NA	8,668	NA	-279	771	14,911	

¹ Includes lease condensate.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Ending stocks for 1973-1980 are totals as of December 31.

⁴ Includes crude oil, natural gas plant production, other hydrocarbons and alcohol.

⁵ Includes stocks located in the Strategic Petroleum Reserve.

⁶ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years.

The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-1,121, 1980-1,420 and 1982-1,462.

Stock withdrawals during 1975, 1981 and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.1.

** Italics denote preliminary data. See Explanatory Note 8.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil¹ and Petroleum Products Overview (continued)

		Imports			Exports			Net ³ Imports
		Total	Crude Oil ²	Petroleum Products	Total	Crude Oil	Petroleum Products	
Thousand Barrels per Day								
1973	AVERAGE	6,256	3,244	3,012	231	2	229	6,025
1974	AVERAGE	6,112	3,477	2,635	221	3	218	5,892
1975	AVERAGE	6,056	4,105	1,951	209	6	204	5,846
1976	AVERAGE	7,313	5,287	2,026	223	8	215	7,090
1977	AVERAGE	8,807	6,615	2,193	243	50	193	8,565
1978	AVERAGE	8,363	6,356	2,008	362	158	204	8,002
1979	AVERAGE	8,456	6,519	1,937	472	235	237	7,984
1980	AVERAGE	6,909	5,263	1,646	544	287	258	6,365
1981	January	6,827	4,932	1,895	558	339	219	6,270
	February	6,772	4,873	1,899	569	198	371	6,203
	March	6,028	4,521	1,507	586	210	376	5,442
	April	5,668	4,338	1,330	570	198	372	5,098
	May	5,775	4,287	1,489	595	312	283	5,180
	June	5,435	4,061	1,375	420	123	297	5,015
	July	5,816	4,296	1,521	571	257	314	5,245
	August	5,767	4,179	1,588	644	204	440	5,123
	September	6,365	4,740	1,624	519	194	325	5,845
	October	5,959	4,380	1,579	738	226	512	5,221
	November	5,741	4,046	1,695	701	278	423	5,041
	December	5,843	4,137	1,706	656	189	467	5,187
	AVERAGE	5,996	4,396	1,599	595	228	367	5,401
1982	January	5,232	3,648	1,585	829	238	591	4,404
	February	4,691	2,949	1,742	804	304	499	3,887
	March	4,461	2,856	1,606	882	321	561	3,579
	April	4,286	2,813	1,474	786	174	611	3,501
	May	4,784	3,314	1,471	803	262	542	3,981
	June	5,227	3,782	1,445	703	94	609	4,524
	July	5,763	4,245	1,518	741	229	512	5,022
	August	5,156	3,820	1,336	858	304	554	4,298
	September	5,359	3,603	1,757	791	184	606	4,569
	October	5,230	3,636	1,594	932	270	662	4,298
	November	5,726	3,863	1,864	786	262	524	4,940
	December	4,562	2,956	1,606	860	193	667	3,702
	AVERAGE	5,041	3,461	1,581	815	236	579	4,226
1983	January	4,372	2,938	1,434	973	117	856	3,399
	February	3,691	2,268	1,423	865	262	603	2,825
	March	3,629	2,232	1,398	801	174	627	2,829
	April*	R 4,744	R 3,154	R 1,590	809	88	721	3,935
	May**	5,004	3,450	1,554	NA	NA	NA	NA
	AVERAGE	4,297	2,817	1,480	NA	NA	NA	NA

¹ Includes lease condensate.

² Includes crude oil for storage in the Strategic Petroleum Reserve.

³ Net Imports = Imports minus Exports.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.1.

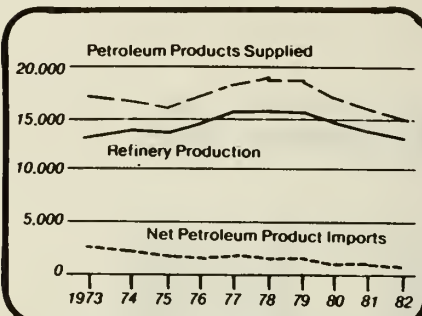
** Italics denote preliminary data. See Explanatory Note 8.

Geographic coverage: The 50 United States and the District of Columbia.

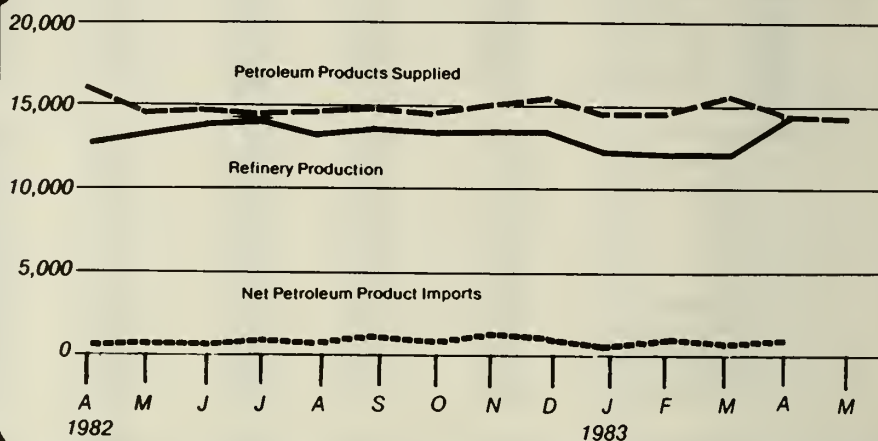
Sources: See "Sources" at the end of this section.

Petroleum Overview

(Thousand Barrels Per Day)



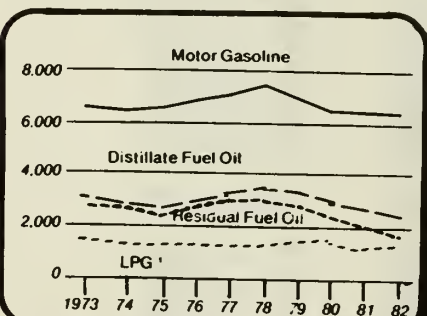
Annual



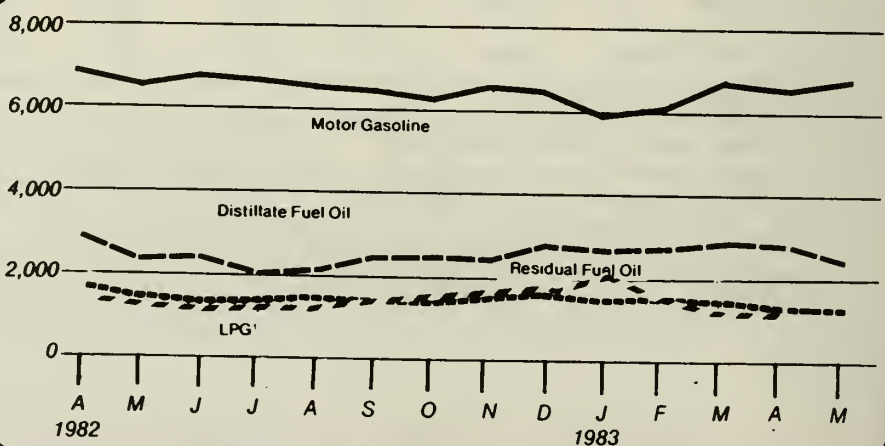
Monthly

Petroleum Products Supplied

(Thousand Barrels Per Day)



Annual

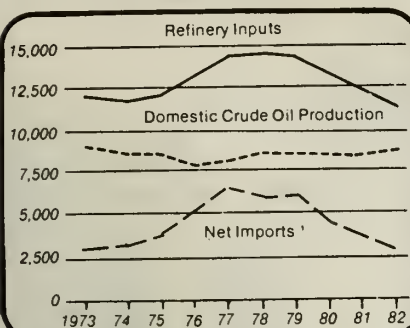


Monthly

¹ Liquefied Petroleum Gases

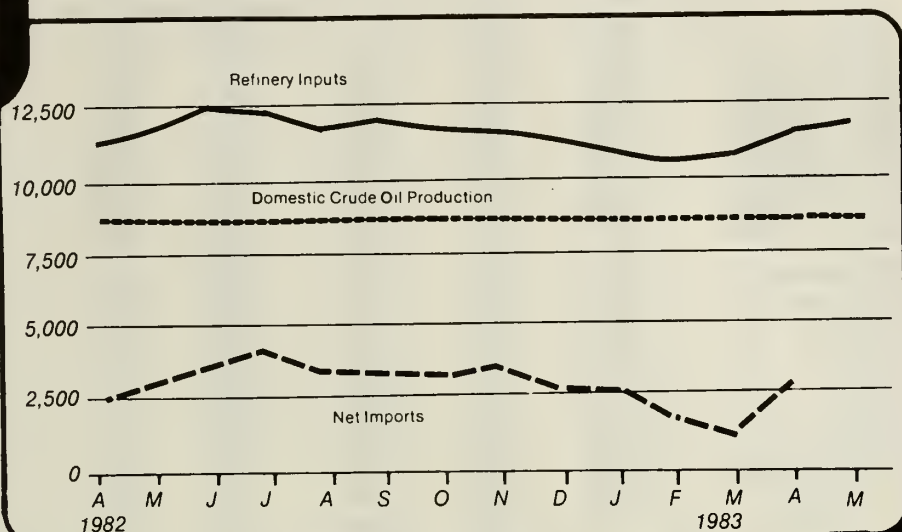
Crude Oil Supply and Disposition

(Thousand Barrels Per Day)



Annual

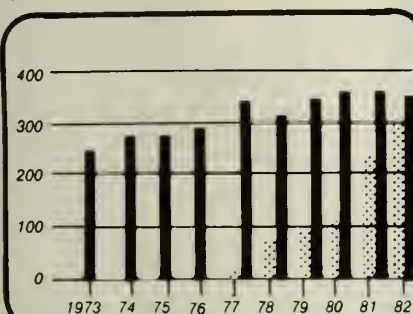
¹ Excludes SPR Imports



Monthly

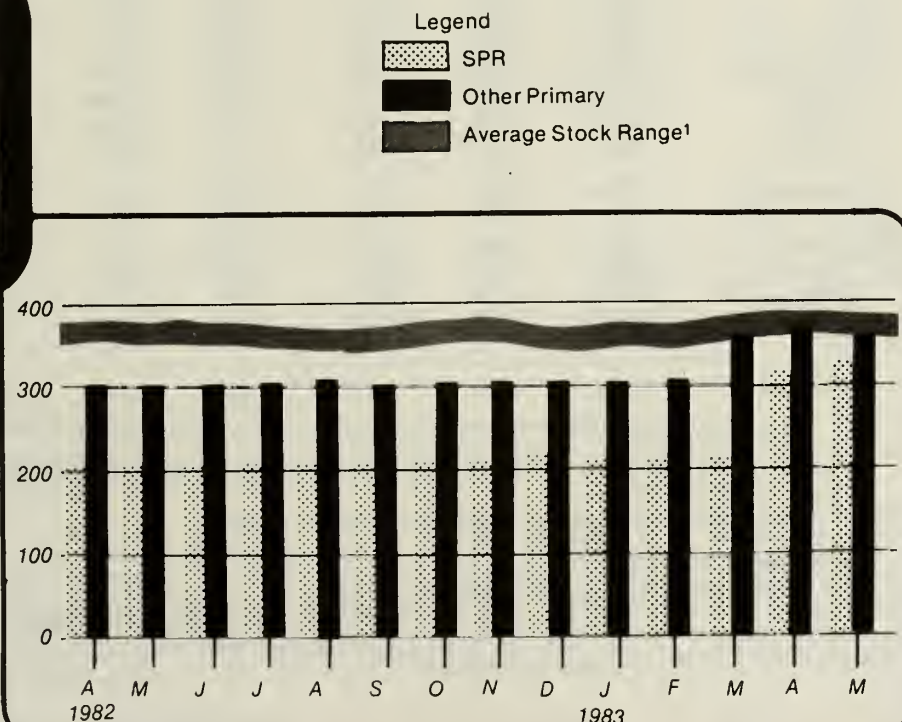
Crude Oil Ending Stocks

(Millions of Barrels)



Annual

¹ Level and width of Average Stock Ranges for crude oil is based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.



Monthly 13

Crude Oil¹ Supply and Disposition

		Supply							
		Field Production		Imports			Stock Withdrawal ²		Unac- counted for Crude Oil
		Total Domestic	Alaskan	Total	SPR ³	Other	SPR ³	Other	
		Thousand Barrels per Day							
1973	AVERAGE	9,208	198	3,244		3,244		11	3
1974	AVERAGE	8,774	193	3,477		3,477		-62	-25
1975	AVERAGE	8,375	191	4,105		4,105		-17	17
1976	AVERAGE	8,132	173	5,287		5,287		-39	77
1977	AVERAGE	8,245	464	6,615	21	6,594	-20	-150	-6
1978	AVERAGE	8,707	1,229	6,356	162	6,195	-163	84	-57
1979	AVERAGE	8,552	1,401	6,519	67	6,452	-67	-81	-11
1980	AVERAGE	8,597	1,617	5,263	44	5,219	-45	-52	34
1981	January	8,540	1,606	4,932	106	4,826	-151	201	113
	February	8,604	1,619	4,873	80	4,793	-127	-150	-41
	March	8,613	1,618	4,521	140	4,382	-155	-477	154
	April	8,557	1,608	4,338	272	4,066	-444	-151	51
	May	8,501	1,580	4,287	386	3,901	-513	122	286
	June	8,629	1,632	4,061	318	3,743	-434	299	49
	July	8,500	1,605	4,296	175	4,121	-324	-36	147
	August	8,583	1,602	4,179	257	3,922	-372	769	16
	September	8,604	1,607	4,740	435	4,305	-486	201	-295
	October	8,563	1,596	4,380	453	3,927	-501	-259	166
	November	8,586	1,614	4,046	271	3,774	-259	-66	279
	December	8,585	1,623	4,137	165	3,971	-252	82	52
		AVERAGE	8,572	1,609	4,396	256	4,141	-336	46	83
1982	January	8,669	1,712	3,648	170	3,478	-159	-77	-138
	February	8,690	1,715	2,949	159	2,790	-213	-3	199
	March	8,597	1,702	2,856	185	2,671	-235	170	278
	April	8,652	1,687	2,813	190	2,623	-233	341	56
	May	8,660	1,725	3,314	204	3,110	-176	225	105
	June	8,681	1,675	3,782	105	3,678	-105	191	110
	July	8,649	1,715	4,245	97	4,147	-97	-58	1
	August	8,701	1,699	3,820	208	3,611	-208	-233	140
	September	8,733	1,707	3,603	139	3,463	-143	395	-218
	October	8,676	1,677	3,636	216	3,420	-216	-348	324
	November	8,690	1,667	3,863	180	3,683	-179	-177	-141
	December	8,660	1,663	2,956	124	2,832	-125	267	2
		AVERAGE	8,671	1,695	3,461	165	3,296	-174	57	60
1983	January	8,634	1,698	2,938	219	2,720	-219	-348	238
	February	8,660	1,725	2,268	197	2,071	-197	-185	423
	March	8,677	1,726	2,232	201	2,031	-184	240	134
	April*	R 8,686	1,710	R 3,154	R 205	R 2,949	R -197	R -241	191
	May**	8,682	1,710	3,450	277	3,173	-276	195	NA
	AVERAGE	8,668	1,714	2,817	220	2,597	-215	-64	NA

¹ Includes lease condensate.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Strategic Petroleum Reserve.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.2.

** Italics denote preliminary data. See Explanatory Note 8.

Note: Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil¹ Supply and Disposition (continued)

		Supply	Disposition				Ending Stocks ²		
		Crude Used Directly ³	Crude Losses	Refinery Inputs	Exports	Product Supplied ³	Total Crude Oil	SPR ⁴	Other Primary
		Thousand Barrels per Day					Millions of Barrels		
1973	AVERAGE	-19	13	12,431	2	NA	242		242
1974	AVERAGE	-15	13	12,133	3	NA	⁵ 265		⁵ 265
1975	AVERAGE	-17	13	12,442	6	NA	271		271
1976	AVERAGE	-18	15	13,416	8	NA	285		285
1977	AVERAGE	-14	16	14,602	50	NA	348	7	340
1978	AVERAGE	-14	16	14,739	158	NA	376	67	309
1979	AVERAGE	-13	16	14,648	235	NA	430	91	339
1980	AVERAGE	-13	15	13,481	287	NA	⁵ 466	108	⁵ 358
1981	January	-43	6	13,247	339	NA	486	112	374
	February	-55	3	12,902	198	NA	494	116	378
	March	-57	6	12,383	210	NA	514	121	393
	April	-59	3	12,091	198	NA	532	134	397
	May	-59	3	12,309	312	NA	544	150	394
	June	-58	7	12,415	123	NA	548	163	385
	July	-58	7	12,261	257	NA	559	173	386
	August	-58	5	12,908	204	NA	547	185	362
	September	-61	4	12,505	194	NA	555	199	356
	October	-63	3	12,057	226	NA	579	215	364
	November	-64	4	12,240	278	NA	589	223	366
	December	-63	4	12,349	189	NA	594	230	363
	AVERAGE	-58	5	12,470	228	NA			
1982	January	-63	3	11,638	238	NA	606	235	371
	February	-64	2	11,252	304	NA	612	241	371
	March	-63	5	11,277	321	NA	614	249	366
	April	-65	3	11,386	174	NA	611	256	355
	May	-62	3	11,801	262	NA	609	261	348
	June	-60	7	12,498	94	NA	607	264	343
	July	-60	3	12,447	229	NA	612	267	345
	August	-57	2	11,858	304	NA	625	274	352
	September	-56	3	12,126	184	NA	618	278	340
	October	-51	2	11,750	270	NA	635	285	351
	November	-51	1	11,741	262	NA	646	290	356
	December	-53	1	11,514	193	NA	⁵ 642	294	⁵ 348
	AVERAGE	-58	4	11,776	236	NA			
1983	January	NA	2	11,070	117	54	661	301	361
	February	NA	3	10,635	262	69	672	306	366
	March	NA	2	10,854	174	70	670	312	359
	April*	NA	2	R 11,436	88	68	R 684	318	R 366
	May**	NA	NA	11,857	NA	NA	686	327	359
	AVERAGE	NA	NA	11,179	NA	NA			

¹ Includes lease condensate.

² Ending stocks for 1973-1980 are totals as of December 31.

³ Beginning in January 1983, crude oil used directly as fuel is presented as product supplied for crude oil. Prior to January 1983 crude oil used directly was included with crude oil losses in this table and with product supplied for distillate and residual fuel oils.

⁴ Strategic Petroleum Reserve.

⁵ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis) end of year stocks would be: 1974-265, 1980-483 (Total) and 375 (Other Primary), and 1982-644 (Total) and 350 (Other Primary).

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.2.

** Italics denote preliminary data. See Explanatory Note 8.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Finished Motor Gasoline Supply and Disposition

		Supply			Disposition				Ending Stocks ¹		
		Total Produc- tion	Imports ²	Stock With- drawal ^{2 3}	Exports	Product Supplied			Total Motor Gasoline ⁴	Finished Motor Gasoline	
						Total	Unleaded ⁵	Unleaded			
Thousand Barrels per Day							Percent of Total	Millions of Barrels			
1973	AVERAGE	6,535	134	9	4	6,674	NA	NA	209		
1974	AVERAGE	6,360	204	-24	2	6,537	NA	NA	⁶ 218		
1975	AVERAGE	6,520	184	-28	2	6,675	NA	NA	235		
1976	AVERAGE	6,841	131	10	3	6,978	NA	NA	231		
1977	AVERAGE	7,033	217	-72	2	7,177	1,976	27.5	258		
1978	AVERAGE	7,169	190	54	1	7,412	2,521	34.0	238		
1979	AVERAGE	6,852	181	2	(^s)	7,034	2,798	39.8	237		
1980	AVERAGE	6,506	140	-66	1	6,579	3,067	46.6	⁶ 261		
1981	January	6,715	138	-421	(^s)	6,431	3,141	48.8	276	227	
	February	6,308	111	-118	1	6,301	3,095	49.1	284	230	
	March	6,213	171	-81	(^s)	6,303	3,097	49.1	285	232	
	April	6,114	186	303	(^s)	6,602	3,284	49.7	272	223	
	May	6,122	150	344	1	6,615	3,115	47.1	259	213	
	June	6,220	186	622	1	7,028	3,419	48.6	242	194	
	July	6,405	151	268	(^s)	6,823	3,424	50.2	228	186	
	August	6,611	124	-95	3	6,637	3,344	50.4	233	189	
	September	6,564	169	-70	2	6,662	3,338	50.1	237	191	
	October	6,426	147	7	3	6,578	3,257	49.5	236	190	
	November	6,564	148	-338	1	6,373	3,198	50.2	248	201	
	December	6,586	197	-91	11	6,681	3,444	51.5	253	203	
	AVERAGE		6,405	157	28	2	6,588	3,264	49.5		
	1982	January	6,181	114	-358	18	5,920	3,033	51.2	262	214
February		5,917	133	28	8	6,070	3,145	51.8	262	213	
March		6,004	183	469	44	6,612	3,396	51.4	248	199	
April		6,104	177	641	33	6,890	3,494	50.7	223	180	
May		6,322	163	188	23	6,650	3,415	51.3	215	174	
June		6,767	195	-136	14	6,812	3,561	52.3	220	178	
July		6,788	200	-165	24	6,799	3,574	52.6	226	183	
August		6,447	284	-60	16	6,655	3,520	52.9	226	185	
September		6,530	215	-217	22	6,507	3,385	52.0	234	191	
October		6,253	177	-25	15	6,391	3,360	52.6	234	192	
November		6,273	206	91	11	6,559	3,448	52.6	230	189	
December		6,540	178	-164	7	6,548	3,486	53.2	⁶ 235	⁶ 194	
AVERAGE		6,347	186	24	20	6,537	3,403	52.1			
1983		January	6,020	148	-186	(^s)	5,981	3,352	56.0	251	208
	February	5,848	142	32	(^s)	6,022	3,257	54.1	251	207	
	March	5,897	205	765	23	6,843	3,620	52.9	224	184	
	April*	R6,202	R 273	R 27	1	R 6,501	3,505	53.9	R 221	R183	
	May**	6,439	272	19	NA	6,722	NA	NA	220	185	
	AVERAGE		6,085	209	134	NA	6,421	NA	NA		

¹ Ending stocks for 1973-1980 are totals as of December 31.

² Beginning in 1981, excludes blending components.

³ A negative number indicates an increase in stocks and a positive number indicates a decrease.

⁴ Includes motor gasoline blending components.

⁵ Includes gasohol.

⁶ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal

and pipeline surveys as a result of extensive investigation during the previous years. The major

impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis),

end of year stocks would be: 1974-225, 1980-263, 1982-244 (Total) and 203 (Finished). Stock withdrawals

during 1975, 1981, and 1983 are calculated using new basis stock levels.

(^s) = Less than 500 barrels per day. NA = Not available. R = Revised data.

* See Explanatory Note 9.3.

** Italics denote preliminary data. See Explanatory Note 8.

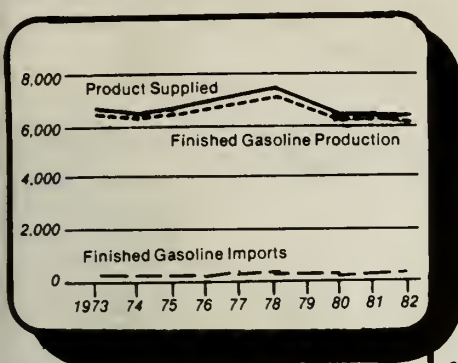
Note: Beginning in January 1981, survey forms were modified.

Geographic coverage: The 50 United States and the District of Columbia.

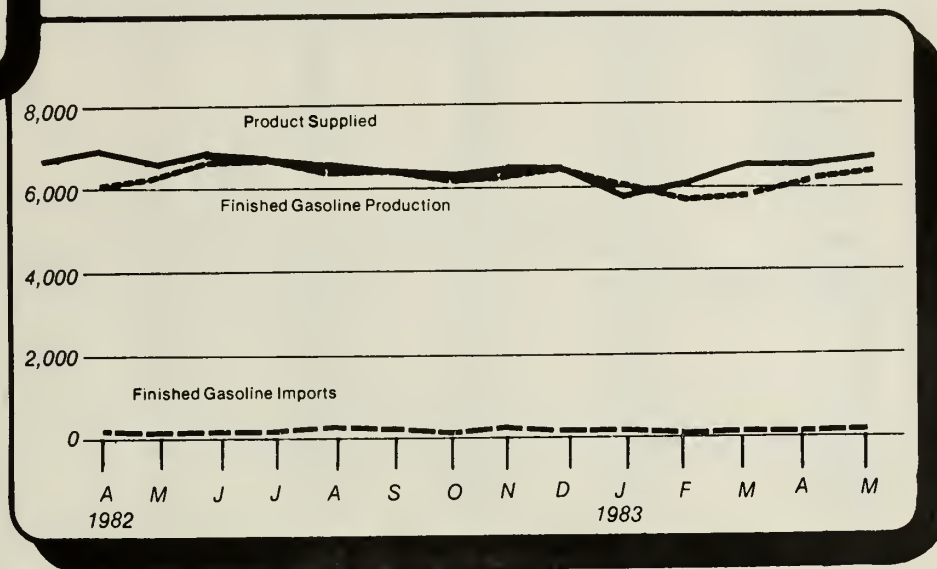
16 Sources: See "Sources" at the end of this section.

Motor Gasoline Supply and Disposition

Thousand Barrels Per Day)



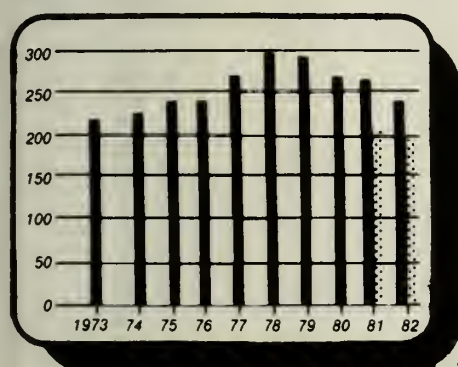
Annual



Monthly

Motor Gasoline Ending Stocks

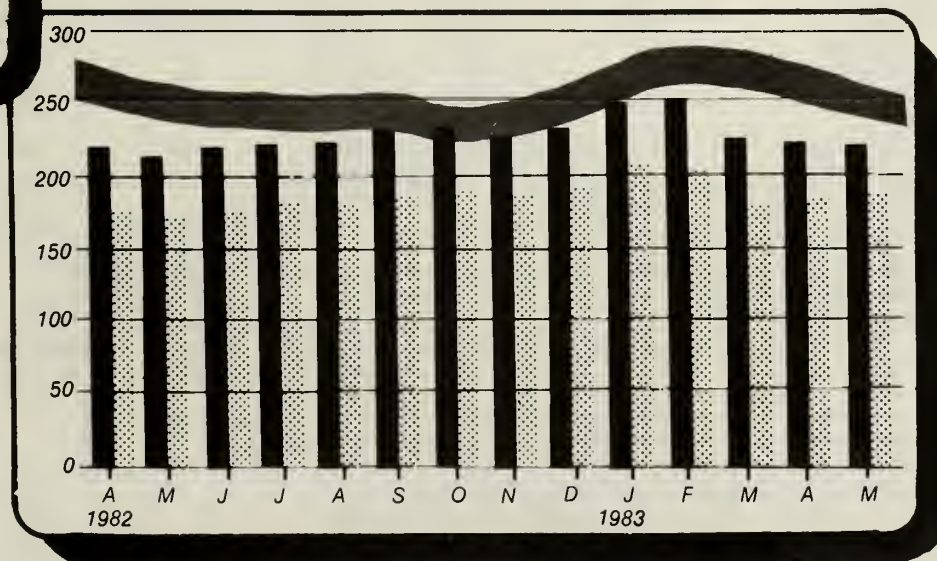
(Millions of Barrels)



Annual

Legend

- Total Motor Gasoline¹
- ▤ Finished Motor Gasoline
- Average Stock Range²



Monthly 17

¹ Includes finished motor gasoline blending components

² Level and width of Average Stock Range for total motor gasoline based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.

Distillate Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Crude Used Directly ³	Exports	Product Supplied ³	
Thousand Barrels per Day								Millions of Barrels
1973	AVERAGE	2,822	392	-115	2	9	3,092	196
1974	AVERAGE	2,669	289	-9	2	2	2,948	⁴ 200
1975	AVERAGE	2,654	155	40	2	1	2,851	209
1976	AVERAGE	2,924	146	62	1	1	3,133	186
1977	AVERAGE	3,278	250	-176	1	1	3,352	250
1978	AVERAGE	3,167	173	93	1	3	3,432	216
1979	AVERAGE	3,153	193	-34	1	3	3,311	229
1980	AVERAGE	2,662	142	64	1	3	2,866	⁴ 205
1981	January	2,989	273	836	11	(^s)	4,109	179
	February	2,809	325	246	11	17	3,373	173
	March	2,484	147	264	9	(^s)	2,904	164
	April	2,418	116	-9	10	3	2,532	165
	May	2,454	179	-232	10	(^s)	2,411	172
	June	2,501	225	-270	9	(^s)	2,464	180
	July	2,395	179	-204	10	2	2,378	186
	August	2,656	174	-450	8	(^s)	2,388	200
	September	2,610	129	-235	10	1	2,513	207
	October	2,485	119	197	9	5	2,803	201
	November	2,716	124	36	11	6	2,880	200
	December	2,856	95	277	11	26	3,212	192
	AVERAGE	2,613	173	38	10	5	2,829	
1982	January	2,615	96	780	10	90	3,410	166
	February	2,447	130	689	11	90	3,187	147
	March	2,294	48	612	10	84	2,881	128
	April	2,357	59	631	13	64	2,996	109
	May	2,618	74	-184	10	75	2,444	114
	June	2,731	100	-335	10	55	2,450	125
	July	2,734	124	-761	11	24	2,084	148
	August	2,526	79	-346	10	40	2,228	159
	September	2,658	59	-77	12	139	2,514	161
	October	2,837	97	-290	8	66	2,586	170
	November	2,863	141	-514	8	24	2,475	186
	December	2,655	109	226	10	143	2,856	⁴ 179
	AVERAGE	2,612	93	32	10	74	2,672	
1983	January	2,314	58	561	NA	173	2,760	168
	February	2,136	58	742	NA	105	2,832	147
	March	1,991	42	926	NA	59	2,900	119
	April*	R 2,169	R 73	R 518	NA	47	R 2,713	103
	May**	2,443	99	-118	NA	NA	2,338	107
	AVERAGE	2,212	66	522	NA	NA	2,706	

¹ Ending Stocks for 1973-1980 are totals as of December 31.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Beginning in January 1983, product supplied for distillate fuel oil does not include crude oil used directly. See Explanatory Note 4.

⁴ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-224, 1980-205, and 1982-186. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

(^s) = Less than 500 barrels per day. NA = Not available. R = Revised data.

Totals may not equal sum of components due to independent rounding.

* See Explanatory Note 9.4.

** Italics denote preliminary data. See Explanatory Note 8.

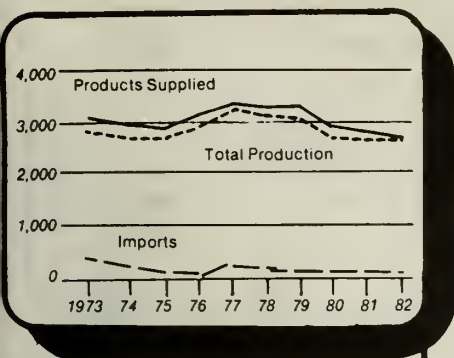
Note: Beginning in January 1981, survey forms were modified.

Geographic Coverage: The 50 United States and the District of Columbia.

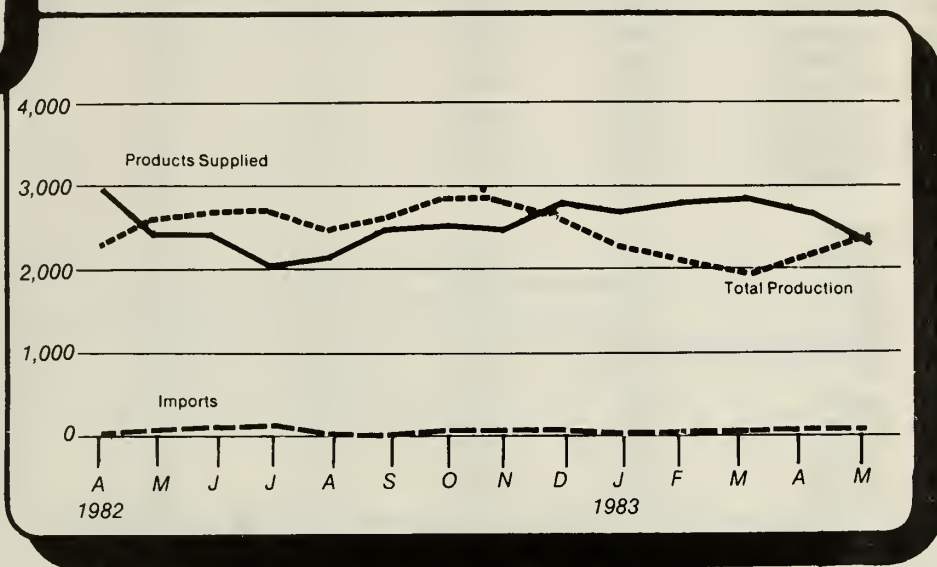
Sources: See "Sources" at the end of this section.

Distillate Fuel Oil Supply and Disposition

(Thousand Barrels Per Day)



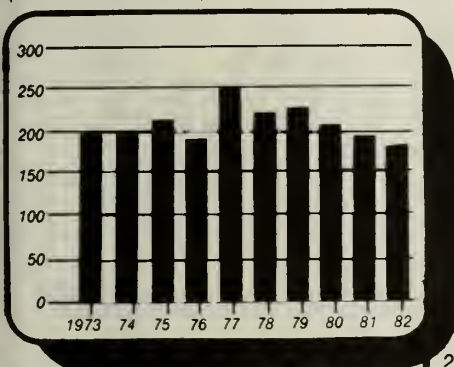
Annual



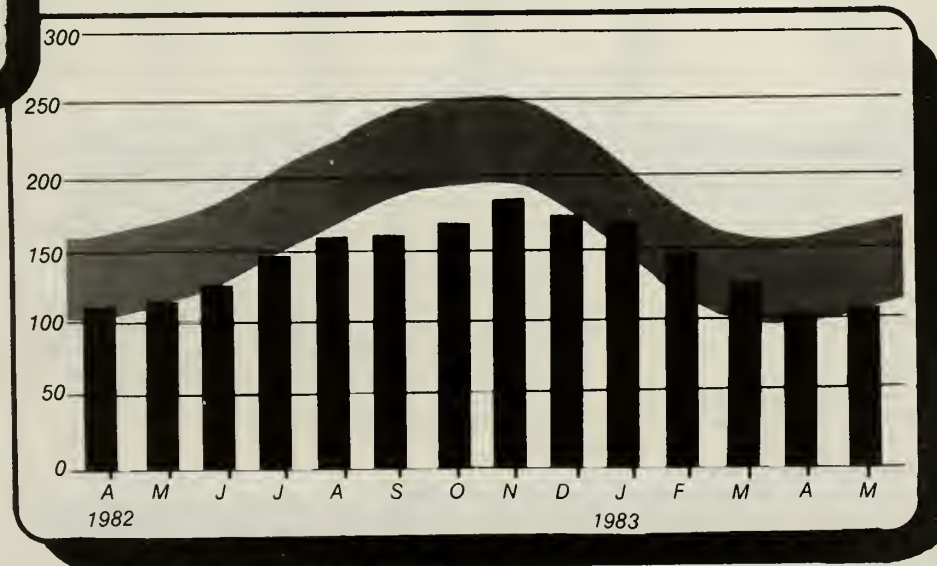
Monthly

Distillate Fuel Oil Ending Stocks

(Millions of Barrels)



Annual



Monthly 19

¹ Level and width of Average Stock Range for distillate fuel oil is based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.

Residual Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Crude Used Directly ³	Exports	Product Supplied ³	
		Thousand Barrels per Day						
								Millions of Barrels
1973	AVERAGE	971	1,853	5	17	23	2,822	53
1974	AVERAGE	1,070	1,587	-17	13	14	2,639	⁴ 60
1975	AVERAGE	1,235	1,223	2	15	15	2,462	74
1976	AVERAGE	1,377	1,413	5	17	12	2,801	72
1977	AVERAGE	1,754	1,359	-48	13	6	3,071	90
1978	AVERAGE	1,667	1,355	-1	13	13	3,023	90
1979	AVERAGE	1,687	1,151	-15	12	9	2,826	96
1980	AVERAGE	1,580	939	10	12	33	2,508	⁴ 92
1981	January	1,612	1,015	302	32	65	2,896	82
	February	1,565	954	150	44	125	2,588	78
	March	1,424	699	100	48	145	2,126	75
	April	1,320	584	66	49	151	1,868	73
	May	1,223	741	-170	49	25	1,817	78
	June	1,232	540	291	49	76	2,037	69
	July	1,174	830	2	48	82	1,971	69
	August	1,231	819	-179	50	69	1,852	75
	September	1,292	841	-176	51	126	1,882	80
	October	1,238	786	8	54	202	1,884	80
	November	1,227	880	-49	53	203	1,909	81
	December	1,329	916	110	52	157	2,250	78
	AVERAGE	1,321	800	37	48	118	2,088	
1982	January	1,183	821	328	53	235	2,150	68
	February	1,136	928	358	53	213	2,261	58
	March	1,121	910	26	53	197	1,912	57
	April	1,162	762	124	52	234	1,867	54
	May	1,127	738	-175	52	191	1,551	59
	June	1,077	643	-49	50	217	1,504	61
	July	1,029	576	51	49	239	1,466	59
	August	1,007	519	200	47	235	1,538	53
	September	1,007	871	-302	44	148	1,472	62
	October	954	758	-56	43	234	1,466	64
	November	989	843	-95	43	182	1,597	66
	December	990	747	8	43	186	1,602	⁴ 66
	AVERAGE	1,065	758	33	48	209	1,695	
1983	January	935	691	243	NA	294	1,574	61
	February	857	632	270	NA	191	1,568	53
	March	833	686	220	NA	169	1,569	46
	April*	R 942	R 743	R -10	NA	310	R 1,364	R 47
	May**	1,002	660	-145	NA	NA	1,334	49
	AVERAGE	915	683	113	NA	NA	1,481	

¹ Ending Stocks for 1973-1980 are totals as of December 31.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ Beginning in January 1983, product supplied for residual fuel oil does not include crude oil used directly. See Explanatory Note 4.

⁴ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-75, 1980-91, and 1982-68. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

* See Explanatory Note 9.4.

** Italics denote preliminary data. See Explanatory Note 8.

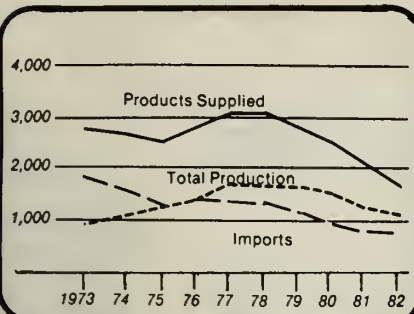
Note: Beginning in January 1981, survey forms were modified.

Geographic Coverage: The 50 United States and the District of Columbia.

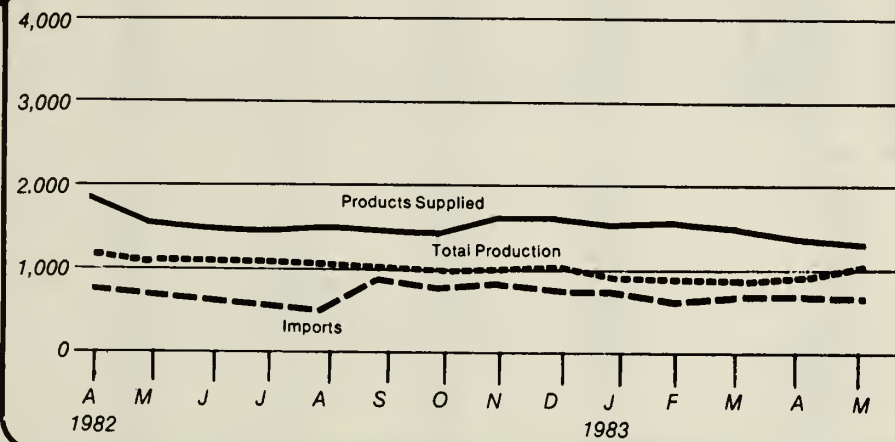
Sources: See "Sources" at the end of this section.

Residual Fuel Oil Supply and Disposition

(Thousand Barrels Per Day)



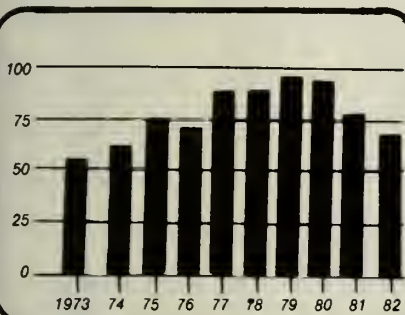
Annual



Monthly

Residual Fuel Oil Ending Stocks

(Millions of Barrels)



Legend

■ Average Stock Range ¹



Monthly 21

¹ Level and width of Average Stock Range for residual fuel oil based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.

Liquefied Petroleum Gases Supply and Disposition

		Supply			Disposition			Ending Stocks ¹
		Total Production	Imports	Stock Withdrawal ²	Refinery Inputs	Exports	Product Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	1,600	132	-35	220	27	1,449	99
1974	AVERAGE	1,565	123	-38	220	25	1,406	³ 113
1975	AVERAGE	1,527	112	-35	246	26	1,333	125
1976	AVERAGE	1,535	130	24	260	25	1,404	116
1977	AVERAGE	1,566	161	-55	233	18	1,422	136
1978	AVERAGE	1,537	123	12	239	20	1,413	132
1979	AVERAGE	1,556	217	70	236	15	1,592	111
1980	AVERAGE	1,535	216	-27	233	21	1,469	³ 120
1981	January	1,617	306	363	352	21	1,913	117
	February	1,593	327	173	303	21	1,769	112
	March	1,551	260	-4	257	20	1,530	112
	April	1,586	214	-236	231	26	1,308	119
	May	1,587	189	-258	220	19	1,279	127
	June	1,567	206	-208	237	24	1,304	133
	July	1,507	213	-258	215	17	1,229	141
	August	1,592	195	-242	235	149	1,160	149
	September	1,622	199	-75	287	21	1,438	151
	October	1,593	287	72	320	76	1,556	149
	November	1,571	280	86	383	58	1,495	146
	December	1,468	255	379	428	50	1,624	135
	AVERAGE	1,571	244	-18	289	42	1,466	
1982	January	1,546	314	480	398	67	1,873	122
	February	1,476	291	310	327	51	1,699	114
	March	1,523	223	145	289	74	1,528	109
	April	1,566	188	107	257	77	1,527	106
	May	1,583	186	-61	235	43	1,431	108
	June	1,571	192	-109	262	106	1,286	111
	July	1,556	227	-5	253	37	1,487	111
	August	1,591	125	-44	254	61	1,357	112
	September	1,606	247	33	273	85	1,528	111
	October	1,582	194	92	306	81	1,481	109
	November	1,603	267	172	370	37	1,634	103
	December	1,626	258	270	395	56	1,702	³ 95
	AVERAGE	1,570	225	115	301	65	1,544	
1983	January	1,662	240	618	313	118	2,088	84
	February	1,560	305	84	237	76	1,636	81
	March	1,517	166	-51	189	127	1,316	83
	April*	1,531	124	-107	198	116	1,232	86
	AVERAGE	1,568	207	139	234	110	1,569	

¹ Ending stocks for 1973 - 1980 are totals as of December 31.

² A negative number indicates an increase in stocks and a positive number indicates a decrease.

³ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-113, 1980-128, and 1982-103. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

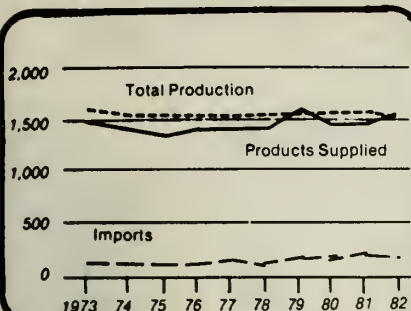
* See Explanatory Note 9.5.

Geographic coverage: The 50 United States and the District of Columbia.

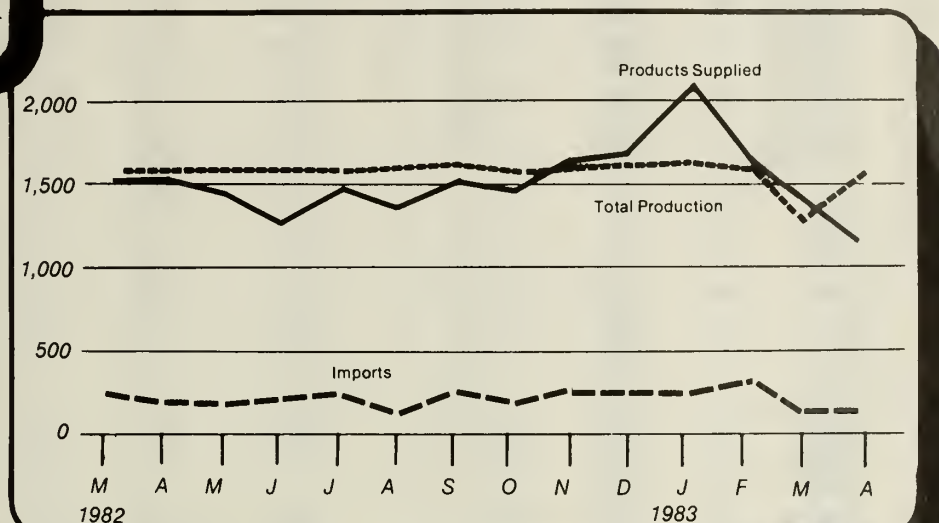
Sources: See "Sources" at the end of this section.

Liquefied Petroleum Gases Supply and Disposition

(Thousand Barrels Per Day)



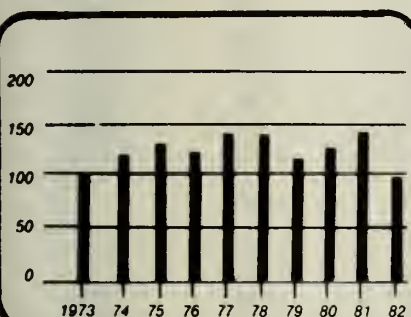
Annual



Monthly

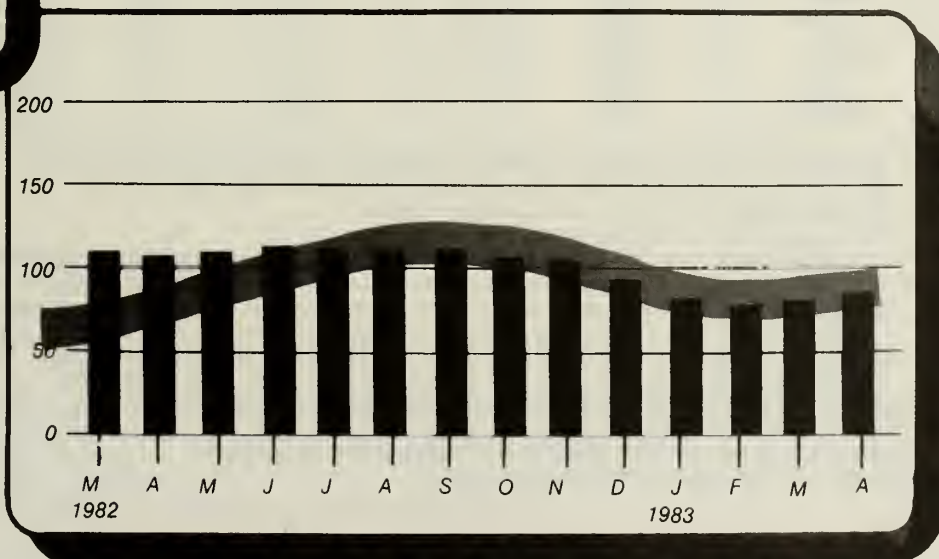
Liquefied Petroleum Gases Ending Stocks

(Millions of Barrels)



Annual

Legend
Average Stock Range¹



Monthly 23

¹ Level and width of Average Stock range for liquefied petroleum gases based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.

Other Petroleum Products¹ Supply and Disposition

		Supply			Disposition			Ending Stocks ²
		Total Production	Imports	Stock Withdrawal ³	Refinery Inputs	Exports	Products Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	3,693	502	-9	750	166	3,270	208
1974	AVERAGE	3,558	432	-28	665	174	3,123	⁴ 218
1975	AVERAGE	3,424	277	-2	537	160	3,002	219
1976	AVERAGE	3,643	206	-5	524	175	3,145	220
1977	AVERAGE	3,912	205	-27	514	165	3,410	230
1978	AVERAGE	4,046	166	14	492	167	3,568	225
1979	AVERAGE	4,153	195	-37	352	209	3,749	238
1980	AVERAGE	3,956	210	-23	311	198	3,634	⁴ 247
1981	January	3,821	162	80	851	132	3,081	296
	February	3,723	182	-200	538	208	2,958	302
	March	3,722	230	-55	642	210	3,043	304
	April	3,711	230	24	733	192	3,040	303
	May	3,892	229	-58	594	238	3,231	305
	June	3,925	218	-29	656	197	3,261	306
	July	3,852	149	284	791	212	3,282	297
	August	3,876	276	-33	676	219	3,225	298
	September	3,718	285	215	883	176	3,159	291
	October	3,503	241	193	710	227	3,000	285
	November	3,579	262	33	784	154	2,935	284
	December	3,543	243	71	805	223	2,829	282
	AVERAGE	3,739	226	46	723	199	3,088	
1982	January	3,181	240	-102	602	180	2,536	284
	February	3,364	260	-116	646	138	2,724	287
	March	3,485	241	-204	734	161	2,627	294
	April	3,394	287	91	801	204	2,767	291
	May	3,296	309	198	823	210	2,769	285
	June	3,481	315	115	815	216	2,879	281
	July	3,578	391	15	862	187	2,935	281
	August	3,519	329	256	841	202	3,060	273
	September	3,442	365	74	767	213	2,901	271
	October	3,472	367	223	901	266	2,896	264
	November	3,464	406	-12	824	269	2,766	264
	December	3,285	314	363	886	275	2,801	⁴ 253
	AVERAGE	3,413	319	77	793	211	2,805	
1983	January	3,222	297	-371	570	271	2,307	271
	February	3,270	287	-1	680	232	2,645	271
	March	3,400	298	-94	570	249	2,786	273
	April*	3,363	377	3	596	247	2,901	273
	AVERAGE	3,314	315	-120	602	250	2,658	

¹ Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.

² Ending Stocks for 1973-1980 are totals as of December 31.

³ A negative number indicates an increase in stocks and a positive number indicates a decrease.

⁴ In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-220, 1980-249, and 1982-259. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

* See Explanatory Note 9.6.

Geographic Coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil and Petroleum Product Imports from OPEC Sources¹

	Algeria	Libya	Saudi Arabia	United Arab Emirates	Indonesia	Iran	Nigeria	Venezuela	Other OPEC ²	Total OPEC	Total Arab OPEC ³
Thousand Barrels per Day											
1973											
AVERAGE	136	164	486	71	213	223	459	1,135	106	2,993	915
1974											
AVERAGE	190	4	461	74	300	469	713	979	88	3,280	752
1975											
AVERAGE	282	232	715	117	390	280	762	702	122	3,601	1,383
1976											
AVERAGE	432	453	1,230	254	539	298	1,025	700	134	5,066	2,424
1977											
AVERAGE	559	723	1,380	335	541	535	1,143	690	287	6,193	3,185
1978											
AVERAGE	649	654	1,144	385	573	555	919	645	226	5,751	2,963
1979											
AVERAGE	636	658	1,356	281	420	304	1,080	690	212	5,637	3,056
1980											
AVERAGE	488	554	1,261	172	348	9	857	481	130	4,300	2,551
1981											
January	341	500	1,284	93	424	0	908	549	27	4,127	2,219
February	381	468	1,122	93	406	0	866	463	92	3,891	2,064
March	352	485	1,027	47	328	0	771	360	54	3,425	1,912
April	263	485	1,034	68	307	0	812	237	39	3,245	1,867
May	393	443	933	17	297	0	664	331	124	3,203	1,796
June	356	380	865	60	367	0	528	248	118	2,922	1,703
July	333	251	1,073	80	340	0	651	466	38	3,233	1,757
August	348	274	1,082	61	377	0	321	523	84	3,070	1,765
September	336	154	1,477	96	371	0	323	359	149	3,264	2,063
October	242	147	1,342	90	427	0	412	389	172	3,220	1,820
November	210	132	1,270	112	353	0	517	535	56	3,184	1,724
December	176	122	1,045	158	400	0	684	411	132	3,129	1,502
AVERAGE	311	319	1,129	81	366	0	620	406	90	3,323	1,848
1982											
January	254	161	877	87	273	0	662	376	128	2,818	1,378
February	139	92	692	79	236	0	579	347	102	2,267	1,044
March	91	37	555	155	200	0	503	399	91	2,032	860
April	85	0	479	122	215	0	427	411	79	1,818	707
May	179	0	601	116	236	0	211	414	54	1,811	897
June	93	0	593	94	215	72	537	361	110	2,075	799
July	122	0	644	123	327	69	910	349	95	2,640	927
August	170	0	489	133	272	27	542	288	134	2,057	807
September	162	0	432	57	191	21	479	514	52	1,907	659
October	249	7	494	61	227	108	291	496	96	2,029	810
November	247	13	489	47	283	34	480	539	115	2,246	795
December	141	0	237	12	265	88	447	399	73	1,661	407
AVERAGE	161	26	548	91	245	35	505	408	94	2,113	840
1983											
January	204	0	282	47	255	43	186	324	43	1,384	533
February	104	0	214	9	217	0	92	371	28	1,035	326
March	63	0	103	0	138	0	121	425	173	1,023	183
April	228	0	180	(^s)	210	0	186	508	125	1,438	409
AVERAGE	150	0	194	14	205	11	147	407	94	1,223	363

¹ Excludes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil processed in OPEC countries.

² Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar.

³ Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait, and Qatar.

(^s) Less than 500 barrels.

Totals may not equal sum of components due to independent rounding.

Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil and Petroleum Product Imports from Non-OPEC Sources¹

	Bahamas	Canada	Mexico	Netherlands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico ²	Virgin Islands ²	Other	Total
	Thousand Barrels per Day									
1973										
AVERAGE	174	1,325	16	585	255	15	99	329	465	3,263
1974										
AVERAGE	164	1,070	8	511	251	8	90	391	340	2,832
1975										
AVERAGE	152	846	71	332	242	14	90	406	300	2,454
1976										
AVERAGE	118	599	87	275	274	31	88	422	353	2,247
1977										
AVERAGE	171	517	179	211	289	126	105	466	550	2,614
1978										
AVERAGE	160	467	318	229	253	180	94	429	484	2,613
1979										
AVERAGE	147	538	439	231	190	202	92	431	548	2,819
1980										
AVERAGE	78	455	533	225	176	176	88	388	491	2,609
1981										
January	39	543	401	198	150	233	89	494	552	2,701
February	84	546	437	227	163	271	46	481	626	2,881
March	74	472	488	227	93	263	45	370	571	2,603
April	68	412	418	198	139	402	40	365	380	2,423
May	122	365	522	213	105	368	58	344	474	2,573
June	51	353	538	196	124	397	67	262	525	2,513
July	77	382	384	212	178	553	50	206	541	2,583
August	69	378	489	255	123	592	68	184	539	2,698
September	111	423	708	163	169	528	72	265	661	3,100
October	63	449	669	161	121	351	60	303	562	2,739
November	63	547	628	168	108	253	76	294	421	2,557
December	70	501	587	148	125	280	73	367	563	2,714
AVERAGE	74	447	522	197	133	375	62	327	534	2,672
1982										
January	28	509	426	179	106	346	62	334	425	2,415
February	50	533	489	221	120	132	38	354	487	2,424
March	43	435	503	189	118	293	62	307	479	2,429
April	67	357	467	180	166	247	36	266	682	2,468
May	76	416	767	152	95	516	47	302	603	2,974
June	32	462	797	141	129	539	58	322	673	3,153
July	30	527	783	158	111	433	38	369	674	3,122
August	68	435	854	145	106	520	24	320	627	3,099
September	92	484	897	195	89	631	51	270	744	3,453
October	45	456	682	148	109	666	52	262	783	3,202
November	48	547	860	203	90	623	81	334	694	3,480
December	89	561	675	174	102	438	48	336	480	2,901
AVERAGE	56	477	684	173	112	451	50	315	613	2,928
1983										
January	68	536	849	218	73	315	40	299	588	2,988
February	92	592	722	179	81	193	50	192	554	2,655
March	86	488	760	187	78	240	43	162	563	2,606
April	167	452	981	216	85	421	20	183	781	3,306
AVERAGE	103	516	829	200	79	294	38	210	622	2,891

¹ Includes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries.

² U.S. Possessions.

Totals may not equal sum of components due to independent rounding.

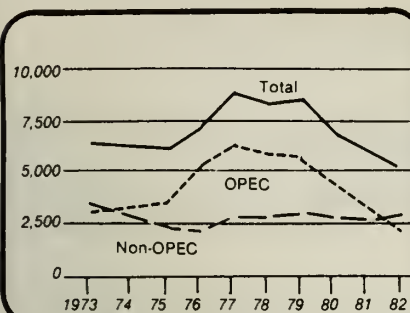
Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.

Geographic coverage: The 50 United States and the District of Columbia.

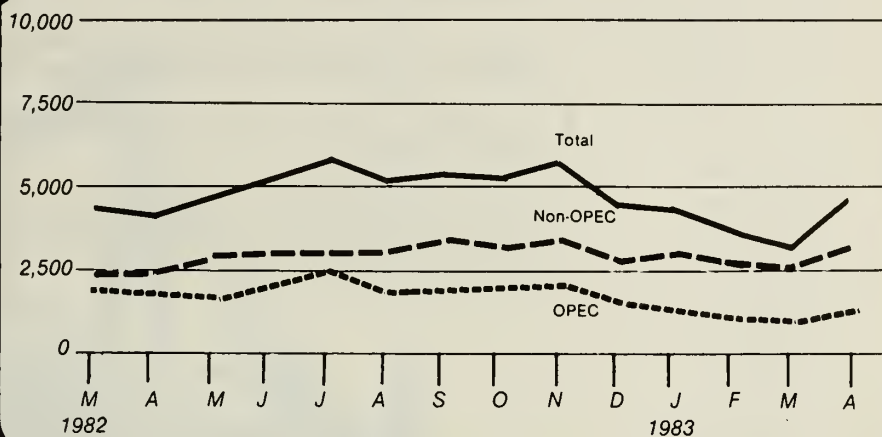
Sources: See "Sources" at the end of this section.

Crude Oil (including SPR) and Petroleum Products Imports

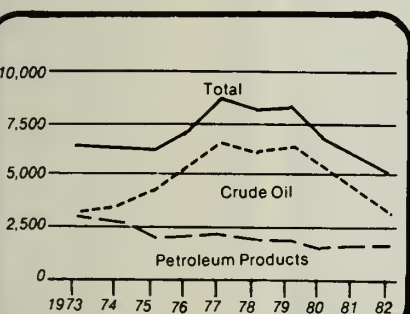
(Thousand Barrels Per Day)



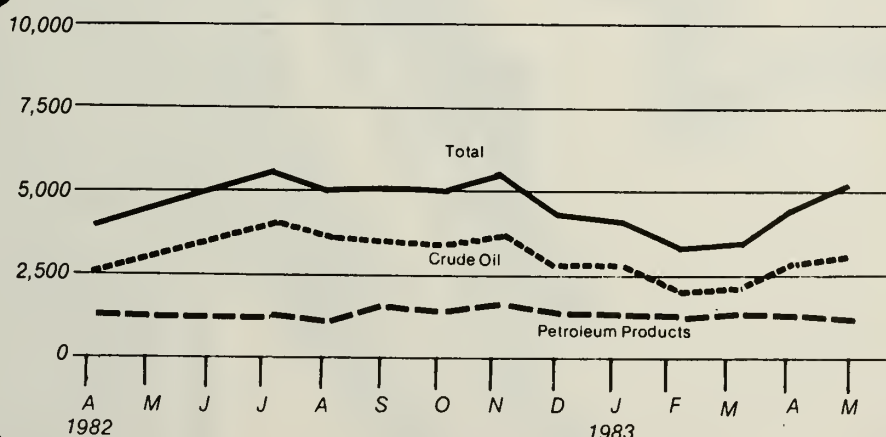
Annual



Monthly



Annual



Monthly 27

Sources

1. 1973 through 1976: Bureau of Mines, U.S. Department of the Interior, *Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual*, Mineral Industry Surveys.
2. 1977 through 1980: Energy Information Administration, U.S. Department of Energy, *Monthly Petroleum Statistics Report*, (unleaded gasoline category).
3. 1977 through 1980: Energy Information Administration, U.S. Department of Energy, *Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual*, Energy Data Reports.
4. January 1981 through December 1981: Energy Information Administration, U.S. Department of Energy, *Petroleum Supply Annual*.
5. January 1982 through April 1983: Detailed statistics in appropriate issues of the *Petroleum Supply Monthly*. (See Explanatory Notes 9.1 through 9.6).
6. May 1983: Estimates based on EIA weekly data (except domestic crude oil production) (See Explanatory Note 1.1).
7. January 1982 through May 1983: Domestic crude oil production estimate based on historical statistics from State Conservation Agencies and the U.S. Geological Survey. (See Explanatory Note 3).

Detailed Statistics



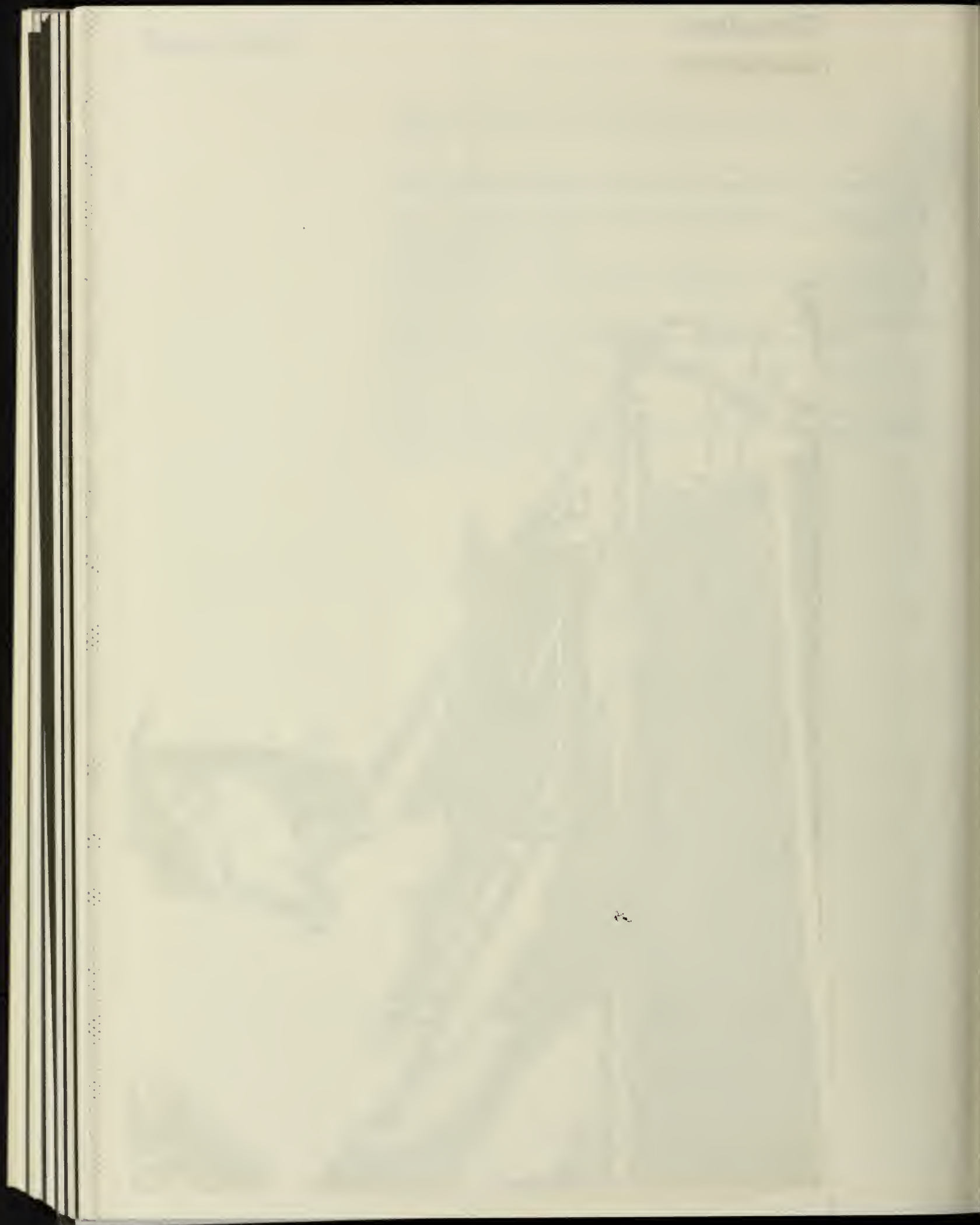


Table 1. U.S. Petroleum Balance, April 1983

	Current Month		Year-to-date	
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
Crude Oil (Including Lease Condensate)				
Field Production				
(1) Alaska	E 51,300	1,710	E 205,757	1,715
(2) Lower 48 States	E 209,292	6,976	E 833,965	6,950
(3) Total U.S.	E 260,592	8,686	E 1,039,722	8,664
Net Imports				
(4) Imports (Gross Excluding SPR)	88,470	2,949	293,716	2,448
(5) SPR Imports	6,153	205	24,668	206
(6) Exports	2,630	88	18,972	158
(7) Imports (Net Including SPR)	91,993	3,066	299,412	2,495
Other Sources				
(8) SPR Withdrawal (+) or Addition (-)	-5,905	-197	-23,908	-199
(9) Other Stock Withdrawal (+) or Addition (-)	-7,225	-241	-15,771	-131
(10) Product Supplied and Losses	-2,087	-70	-8,041	-67
(11) Unaccounted for 1	5,715	191	29,082	242
(12) Total Other Sources	-9,502	-317	-18,638	-155
(13) Crude Input to Refineries	343,083	11,436	1,320,496	11,004
(13) = (3) + (7) + (12)				
Natural Gas Plant Liquids (NGPL)				
(14) Field Production	45,062	1,502	189,006	1,575
(15) Imports 2	154	5	1,014	8
(16) Stock Withdrawal (+) or Addition (-) 2	-32	-1	-2,261	-19
(17) Total NGPL Supply	45,184	1,506	187,759	1,565
Other Liquids				
Unfinished Oils and Gasoline Blending Components, Total				
(18) Stock Withdrawal (+) or Addition (-)	-300	-10	-4,842	-40
(19) Imports	8,102	270	25,588	213
(20) Other Hydrocarbons and Alcohol New Supply (Field Production)	1,221	41	5,568	46
(21) Refinery Processing Gain 1	12,982	433	54,987	458
(22) Crude Oil Product Supplied	2,037	68	7,806	65
(23) Total Other Liquids	24,042	801	89,107	743
(23) = (18) through (22)				
(24) Total Production of Products 3	412,310	13,744	1,597,362	13,311
(24) = (13) + (17) + (23)				
Net Imports of Refined Products 3				
(25) Imports (Gross)	39,445	1,315	148,716	1,239
(26) Exports	21,642	721	84,529	704
(27) Imports (Net)	17,803	593	64,187	535
(28) Total New Supply of Products	430,113	14,337	1,661,549	13,846
(28) = (24) + (27)				
(29) Refined Products Stock Withdrawal (+) or Addition (-) 3	13,244	441	133,135	1,109
(30) Total Petroleum Products Supplied for Domestic Use	443,357	14,779	1,794,684	14,956
(30) = (28) + (29)				
(31) Finished Motor Gasoline	195,022	6,501	761,198	6,343
(32) Distillate Fuel Oil	81,382	2,713	336,124	2,801
(33) Residual Fuel Oil	40,921	1,364	182,283	1,519
(34) Liquefied Petroleum Gases	36,975	1,232	188,310	1,569
(35) Other 4	87,022	2,901	318,964	2,658
(36) Crude Oil	2,037	68	7,806	65
(37) Total Product Supplied	443,358	14,779	1,794,685	14,956
(37) = (31) through (36)				
Ending Stocks, All Oils				
(38) Crude Oil and Lease Condensate (Excluding SPR)	365,815	--	365,815	--
(39) Strategic Petroleum Reserve (SPR)	317,735	--	317,735	--
(40) Unfinished Oils	114,100	--	114,100	--
(41) Gasoline Blending Components	38,564	--	38,564	--
(42) Natural Gasoline and Unfractionated Stream	13,729	--	13,729	--
(43) Finished Refined Products 3	525,721	--	525,721	--
(44) Total Stocks	1,375,664	--	1,375,664	--

1 A balancing item.

2 Includes isopentane, natural gasoline, unfractionated stream, and plant condensate only.

3 For products included see Explanatory Note 9.7.

4 Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil and liquefied petroleum gases.

E = Estimated.

-- Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1, 2 and 9.7.

Table 2. Supply and Disposition of Crude Oil and Petroleum Products, April 1983
(Thousands of Barrels)

Commodity	Supply				Disposition					
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (Including lease condensate)	E 260,592	0	94,623	-13,130	5,715	50	343,083	2,630	2,037	683,550
Natural Gas Liquids and LRGs	44,649	9,696	3,860	-3,243	0	0	11,870	3,487	39,605	99,749
Natural Gasoline and Isopentane	6,750	0	0	858	0	0	4,979	0	2,629	5,510
Unfractionated Stream	1,843	0	0	-1,758	0	0	85	0	0	7,789
Plant Condensate	-165	0	154	868	0	0	856	0	1	430
Liquefied Petroleum Gases	36,221	9,696	3,706	-3,211	0	0	5,950	3,487	36,975	86,020
Ethane	7,333	546	923	157	0	0	96	(s)	8,862	5,161
Propane	12,647	8,148	1,466	676	0	0	151	2,629	20,158	40,744
Butane	6,074	802	946	-2,425	0	0	3,259	858	1,280	17,027
Butane-Propane Mixtures	163	190	371	-273	0	0	298	0	153	1,457
Ethane-Propane Mixtures	7,003	0	0	-491	0	0	0	0	6,512	13,576
Isobutane	3,001	10	0	-855	0	0	2,146	0	10	8,055
Other Liquids	1,221	0	8,102	-300	0	0	11,968	0	-2,945	152,664
Other Hydrocarbons and Alcohol	1,221	0	0	-2	0	0	1,219	0	0	286
Unfinished Oils	0	0	7,437	-2,838	0	0	5,747	0	-1,148	114,100
Motor Gasoline Blending Components	0	0	665	2,453	0	0	4,978	0	-1,860	37,893
Aviation Gasoline Blending Components	0	0	0	87	0	0	24	0	63	385
Finished Petroleum Products	414	370,207	35,739	16,455	0	0	0	18,155	404,660	439,701
Finished Motor Gasoline	104	185,955	8,203	797	0	0	0	38	195,022	182,909
Finished Leaded Motor Gasoline	72	84,486	5,028	324	0	0	0	38	89,872	90,968
Finished Unleaded Motor Gasoline	32	101,469	3,176	473	0	0	0	0	105,150	91,941
Finished Aviation Gasoline	68	608	1	97	0	0	0	0	774	2,429
Naphtha-Type Jet Fuel	0	5,669	(s)	961	0	0	0	200	6,431	6,401
Kerosene-Type Jet Fuel	1	23,750	453	1,032	0	0	0	17	25,219	33,849
Kerosene	3	2,710	560	631	0	0	0	1	3,903	8,307
Distillate Fuel Oil	1	65,070	2,185	15,534	0	0	0	1,408	81,382	103,183
Residual Fuel Oil	0	28,247	22,284	-299	0	0	0	9,311	40,921	46,614
Naphtha < 400 Deg. for Petro. Feed. Use	0	4,391	87	-225	0	0	0	130	4,123	2,246
Other Oils > 400 Deg. for Petro. Feed. Use	0	8,566	2	429	0	0	0	599	8,398	1,756
Special Naphthas	109	1,688	407	-83	0	0	0	35	2,086	3,126
Lubricants	0	4,210	153	451	0	0	0	644	4,170	12,653
Waxes	0	424	26	1	0	0	0	18	434	770
Petroleum Coke	0	11,418	0	-35	0	0	0	5,710	5,673	6,618
Asphalt and Road Oil	0	10,658	80	-2,945	0	0	0	11	7,781	27,299
Still Gas	0	15,374	0	0	0	0	0	0	15,374	0
Miscellaneous Products	128	1,469	1,298	109	0	0	0	34	2,971	1,541
Total	306,876	379,903	142,325	-218	5,715	50	366,921	24,272	443,357	1,375,664

¹ Unaccounted for crude oil is a balancing item.

(s) Less than 500 Barrels per day.

E = Estimated.

Note: Totals may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products, January-April 1983
(Thousands of Barrels)

Commodity	Supply			Disposition						
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (Including lease condensate)	E 1,039,722	0	318,384	-39,679	29,082	235	1,320,496	18,972	7,806	683,550
Natural Gas Liquids and LRGs	187,526	34,889	25,834	14,437	0	0	53,200	13,204	196,283	99,749
Natural Gasoline and Isopentane	28,269	0	235	477	0	0	21,017	0	7,964	5,510
Unfractionated Stream	3,919	0	0	-3,750	0	0	169	0	0	7,789
Plant Condensate	2,086	0	778	1,012	0	0	3,868	0	8	430
Liquefied Petroleum Gases	153,252	34,889	24,821	16,698	0	0	28,146	13,204	188,310	86,020
Ethane	30,444	1,509	5,577	810	0	0	312	(s)	38,028	5,161
Propane	53,975	31,446	6,624	17,493	0	0	517	8,642	100,379	40,744
Butane	24,769	1,819	6,040	-345	0	0	15,295	4,562	12,427	17,027
Butane-Propane Mixtures	741	81	2,348	668	0	0	795	0	3,043	1,457
Ethane-Propane Mixtures	31,873	0	4,232	-2,294	0	0	0	0	33,811	13,576
Isobutane	11,450	34	0	366	0	0	11,227	0	623	8,055
Other Liquids	5,568	0	25,588	-4,842	0	0	47,208	0	-20,894	152,664
Other Hydrocarbons and Alcohol	5,568	0	0	25	0	0	5,593	0	0	286
Unfinished Oils	0	0	22,026	-8,823	0	0	24,608	0	-11,405	114,100
Motor Gasoline Blending Components	0	0	3,562	3,849	0	0	16,301	0	-8,890	37,893
Aviation Gasoline Blending Components	0	0	0	107	0	0	706	0	-599	385
Finished Petroleum Products	1,481	1,441,002	123,895	116,437	0	0	0	71,325	1,611,490	439,701
Finished Motor Gasoline	359	718,862	23,133	19,628	0	0	0	784	761,198	182,909
Finished Leaded Motor Gasoline	253	324,446	13,632	11,187	0	0	0	784	348,734	90,968
Finished Unleaded Motor Gasoline	106	394,416	9,501	8,441	0	0	0	0	412,464	91,941
Finished Aviation Gasoline	159	2,344	210	-115	0	0	0	0	2,598	2,429
Naphtha-Type Jet Fuel	0	25,006	(s)	788	0	0	0	200	25,594	6,401
Kerosene-Type Jet Fuel	1	96,048	2,608	-1,848	0	0	0	539	96,270	33,849
Kerosene	12	14,488	715	2,485	0	0	0	4	17,696	8,307
Distillate Fuel Oil	7	258,341	6,913	82,396	0	0	0	11,533	336,124	103,183
Residual Fuel Oil	0	107,035	82,657	21,615	0	0	0	29,025	182,283	46,614
Naphtha < 400 Deg. for Petro. Feed. Use	0	15,949	1,471	-279	0	0	0	425	16,716	2,246
Other Oils > 400 Deg. for Petro. Feed. Use	0	32,614	6	424	0	0	0	1,668	31,376	1,756
Special Naphthas	303	6,274	1,895	348	0	0	0	363	8,457	3,126
Lubricants	0	16,099	934	528	0	0	0	1,847	15,714	12,653
Waxes	0	1,693	121	16	0	0	0	80	1,750	770
Petroleum Coke	0	47,164	0	103	0	0	0	24,601	22,666	6,618
Asphalt and Road Oil	0	31,330	293	-10,030	0	0	0	134	21,458	27,299
Still Gas	0	60,785	0	0	0	0	0	0	60,785	0
Miscellaneous Products	640	6,970	2,940	378	0	0	0	123	10,806	1,541
Total	1,234,297	1,475,891	493,701	86,353	29,082	235	1,420,904	103,500	1,794,685	1,375,664

¹ Unaccounted for crude oil is a balancing item.

(s) Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, April 1983
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Stock Withdrawal(+) Addition(-)	Unaccounted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (Including lease condensate)	E 8,686	0	3,154	-438	191	2	11,436	88	68
Natural Gas Liquids and LRGs	1,488	323	129	-108	0	0	396	116	1,320
Natural Gasoline and Isopentane	225	0	0	29	0	0	166	0	88
Unfractionated Stream	61	0	0	-59	0	0	3	0	(s)
Plant Condensate	-5	0	5	29	0	0	29	0	(s)
Liquefied Petroleum Gases	1,207	323	124	-107	0	0	198	116	1,232
Ethane	244	18	31	5	0	0	3	(s)	295
Propane	422	272	49	23	0	0	5	88	672
Butane	202	27	32	-81	0	0	109	29	43
Butane-Propane Mixtures	5	6	12	-9	0	0	10	0	5
Ethane-Propane Mixtures	233	0	0	-16	0	0	0	0	217
Isobutane	100	(s)	0	-28	0	0	72	0	(s)
Other Liquids	41	0	270	-10	0	0	399	0	-98
Other Hydrocarbons and Alcohol	41	0	0	(s)	0	0	41	0	0
Unfinished Oils	0	0	248	-95	0	0	192	0	-38
Motor Gasoline Blending Components	0	0	22	82	0	0	166	0	-62
Aviation Gasoline Blending Components	0	0	0	3	0	0	1	0	2
Finished Petroleum Products	14	12,340	1,191	549	0	0	0	605	13,489
Finished Motor Gasoline	3	6,198	273	27	0	0	0	1	6,501
Finished Leaded Motor Gasoline	2	2,816	168	11	0	0	0	1	2,996
Finished Unleaded Motor Gasoline	1	3,382	106	16	0	0	0	0	3,505
Finished Aviation Gasoline	2	20	(s)	3	0	0	0	0	26
Naphtha-Type Jet Fuel	0	189	(s)	32	0	0	0	7	214
Kerosene-Type Jet Fuel	(s)	792	15	34	0	0	0	1	841
Kerosene	(s)	90	19	21	0	0	0	(s)	130
Distillate Fuel Oil	(s)	2,169	73	518	0	0	0	47	2,713
Residual Fuel Oil	0	942	743	-10	0	0	0	310	1,364
Naphtha < 400 Deg. for Petro. Feed. Use	0	146	3	-7	0	0	0	4	137
Other Oils > 400 Deg. for Petro. Feed. Use	0	286	(s)	14	0	0	0	20	280
Special Naphthas	4	56	14	-3	0	0	0	1	70
Lubricants	0	140	5	15	0	0	0	21	139
Waxes	0	14	1	(s)	0	0	0	1	14
Petroleum Coke	0	381	0	-1	0	0	0	190	189
Asphalt and Road Oil	0	355	3	-98	0	0	0	(s)	259
Still Gas	0	512	0	0	0	0	0	0	512
Miscellaneous Products	4	49	43	4	0	0	0	1	99
Total	10,229	12,663	4,744	-7	191	2	12,231	809	14,779

¹ Unaccounted for crude oil is a balancing item.

(s) Less than 500 Barrels per day.

E = Estimated.

Note: Totals may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-April 1983
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) Addition (-)	Unaccounted For Crude Oil ¹	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 8,664	0	2,653	-331	242	2	11,004	158	85
Natural Gas Liquids and LRGs	1,563	291	215	120	0	0	443	110	1,636
Natural Gasoline and Isopentane	236	0	2	4	0	0	175	0	66
Unfractionated Stream	33	0	0	-31	0	0	1	0	(s)
Plant Condensate	17	0	6	8	0	0	32	0	(s)
Liquefied Petroleum Gases	1,277	291	207	139	0	0	235	110	1,569
Ethane	254	13	46	7	0	0	3	(s)	317
Propane	450	262	55	146	0	0	4	72	836
Butane	206	15	50	-3	0	0	127	38	104
Butane-Propane Mixtures	6	1	20	6	0	0	7	0	25
Ethane-Propane Mixtures	266	0	35	-19	0	0	0	0	282
Isobutane	95	(s)	0	3	0	0	94	0	5
Other Liquids	46	0	213	-40	0	0	393	0	-174
Other Hydrocarbons and Alcohol	46	0	0	(s)	0	0	47	0	0
Unfinished Oils	0	0	184	-74	0	0	205	0	-95
Motor Gasoline Blending Components	0	0	30	32	0	0	136	0	-74
Aviation Gasoline Blending Components	0	0	0	1	0	0	6	0	-5
Finished Petroleum Products	12	12,008	1,032	970	0	0	0	594	13,429
Finished Motor Gasoline	3	5,991	193	164	0	0	0	7	6,343
Finished Leaded Motor Gasoline	2	2,704	114	93	0	0	0	7	2,906
Finished Unleaded Motor Gasoline	1	3,287	79	70	0	0	0	0	3,437
Finished Aviation Gasoline	1	20	2	-1	0	0	0	0	22
Naphtha-Type Jet Fuel	0	208	(s)	7	0	0	0	2	213
Kerosene-Type Jet Fuel	(s)	800	22	-15	0	0	0	4	802
Kerosene	(s)	121	6	21	0	0	0	(s)	147
Distillate Fuel Oil	(s)	2,153	58	687	0	0	0	96	2,801
Residual Fuel Oil	0	892	689	180	0	0	0	242	1,519
Naphtha < 400 Deg. for Petro. Feed. Use	0	133	12	-2	0	0	0	4	139
Other Oils > 400 Deg. for Petro. Feed. Use	0	272	(s)	4	0	0	0	14	261
Special Naphthas	3	52	16	3	0	0	0	3	70
Lubricants	0	134	8	4	0	0	0	15	131
Waxes	0	14	1	(s)	0	0	0	1	15
Petroleum Coke	0	393	0	1	0	0	0	205	189
Asphalt and Road Oil	0	261	2	-84	0	0	0	1	179
Still Gas	0	507	0	0	0	0	0	0	507
Miscellaneous Products	5	58	25	3	0	0	0	1	90
Total	10,286	12,299	4,114	720	242	2	11,841	863	14,956

¹ Unaccounted for crude oil is a balancing item.

(s) Less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 6. PAD District I, Supply and Disposition of Crude Oil and Petroleum Products, April 1983
(Thousands of Barrels)

Commodity	Supply					Disposition					
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 2,427	0	23,909	-480	1,456	4,533	-1	31,846	0	0	16,391
Natural Gas Liquids and LRGs	825	1,315	325	-85	0	1,937	0	161	146	4,010	4,208
Liquefied Petroleum Gases	572	1,315	293	-76	0	1,937	0	126	146	3,770	4,164
Other Products ²	253	0	31	-9	0	0	0	35	0	240	44
Other Liquids	105	0	2,727	-64	0	84	0	3,534	0	-682	17,255
Other Hydrocarbons and Alcohol	105	0	0	6	0	0	0	111	0	0	44
Unfinished Oils	0	0	2,165	81	0	84	0	2,926	0	-596	13,050
Motor Gasoline Blending Components	0	0	562	-156	0	0	0	497	0	-91	4,161
Aviation Gasoline Blending Components	0	0	0	5	0	0	0	0	0	5	0
Finished Petroleum Products	88	36,104	29,017	1,150	0	71,755	0	0	527	137,586	133,800
Finished Motor Gasoline	88	17,713	6,648	-5,229	0	44,473	0	0	2	63,691	56,640
Finished Leaded Motor Gasoline	57	7,194	3,923	-2,995	0	18,080	0	0	2	26,258	27,719
Finished Unleaded Motor Gasoline	31	10,519	2,724	-2,234	0	26,393	0	0	0	37,433	28,921
Finished Aviation Gasoline	0	23	1	62	0	121	0	0	0	207	420
Naphtha-Type Jet Fuel	0	325	0	593	0	555	0	0	0	1,473	385
Kerosene-Type Jet Fuel	0	916	314	-338	0	9,370	0	0	(s)	10,262	9,406
Kerosene	0	402	296	17	0	379	0	0	(s)	1,093	3,731
Distillate Fuel Oil	0	7,368	1,958	6,303	0	13,865	0	0	2	29,491	31,809
Residual Fuel Oil	0	3,362	19,534	334	0	1,622	0	0	(s)	24,852	20,271
Naphtha and Other Oils for Petrochem.											
Feedstock	0	364	6	21	0	55	0	0	89	357	40
Special Naphthas	0	11	112	172	0	295	0	0	3	587	560
Lubricants	0	642	78	-67	0	478	0	0	216	915	3,402
Waxes	0	94	5	2	0	3	0	0	4	100	169
Petroleum Coke	0	1,096	0	-159	0	0	0	0	199	738	744
Asphalt and Road Oil	0	1,945	62	-569	0	198	0	0	1	1,635	5,891
Still Gas	0	1,633	0	0	0	0	0	0	0	1,633	0
Miscellaneous Products	0	210	5	8	0	341	0	0	11	553	332
Total	3,445	37,419	55,977	521	1,456	78,309	-1	35,541	673	140,915	171,654

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 7. PAD District II Supply and Disposition of Crude Oil and Petroleum Products, April 1983
(Thousands of Barrels)

Commodity	Supply				Disposition						
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)											
E 30,561	0	16,953	1,736	32,057	762	7	81,669	393	0	81,164	
Natural Gas Liquids and LRGs											
7,944	2,347	2,250	511	0	2,530	0	3,701	705	11,177	31,783	
8,053	2,347	2,250	-39	0	1,764	0	2,229	705	11,442	28,160	
Other Products ²	0	0	550	0	766	0	1,472	0	-265	3,623	
Other Liquids											
411	0	743	-1,833	0	1,080	0	-406	0	807	29,314	
Other Hydrocarbons and Alcohol	411	0	-11	0	0	0	400	0	0	123	
Unfinished Oils	0	0	-2,703	0	119	0	-2,467	0	523	20,644	
Motor Gasoline Blending Components	0	0	861	0	961	0	1,641	0	284	8,446	
Aviation Gasoline Blending Components	0	0	20	0	0	0	20	0	0	101	
Finished Petroleum Products											
8	85,570	1,270	6,763	0	11,341	0	0	942	104,010	122,981	
Finished Motor Gasoline	0	51,894	363	2,047	0	7,640	0	0	1	61,944	56,918
Finished Leaded Motor Gasoline	0	25,844	283	865	0	3,785	0	0	1	30,777	29,518
Finished Unleaded Motor Gasoline	0	26,050	80	1,182	0	3,855	0	0	0	31,167	27,400
Finished Aviation Gasoline	0	86	0	54	0	75	0	0	0	215	654
Naphtha-Type Jet Fuel	0	855	0	3	0	289	0	0	0	1,147	1,744
Kerosene-Type Jet Fuel	0	4,191	0	-334	0	897	0	0	0	4,754	7,244
Kerosene	0	183	0	266	0	19	0	0	(s)	468	2,237
Distillate Fuel Oil	0	15,250	34	5,727	0	2,642	0	0	0	23,653	33,250
Residual Fuel Oil	0	2,128	763	146	0	-386	0	0	0	2,651	3,441
Naphtha and Other Oils for Petro. Feed.	0	486	48	29	0	34	0	0	6	591	257
Special Naphthas	0	301	35	79	0	72	0	0	1	486	479
Lubricants	0	741	4	240	0	-11	0	0	11	962	2,191
Waxes	0	45	1	-4	0	0	0	0	1	41	80
Petroleum Coke	0	2,928	0	47	0	0	0	0	918	2,057	1,813
Asphalt and Road Oil	0	3,108	7	-1,545	0	234	0	0	2	1,802	12,507
Still Gas	0	3,211	0	0	0	0	0	0	0	3,211	0
Miscellaneous Products	8	163	15	8	0	-164	0	0	2	28	166
Total											
38,924	87,917	21,216	7,177	32,057	15,713	7	84,964	2,040	115,994	265,242	

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 8. PAD District III Supply and Disposition of Crude Oil and Petroleum Products, April 1983
(Thousands of Barrels)

Commodity	Supply				Disposition						
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 125,427	0	48,562	-13,773	-21,847	21,034	8	159,371	0	24	483,173
Natural Gas Liquids and LRGs	32,672	4,629	371	-3,617	0	-3,731	0	6,948	2,498	20,878	61,055
Liquefied Petroleum Gases	26,217	4,629	371	-3,061	0	-3,840	0	2,865	2,498	18,953	51,654
Other Products ²	6,455	0	0	-556	0	109	0	4,083	0	1,925	9,401
Other Liquids	408	0	4,605	-1,558	0	-1,164	0	6,345	0	-4,054	68,801
Other Hydrocarbons and Alcohol	408	0	0	4	0	0	0	412	0	0	112
Unfinished Oils	0	0	4,605	-2,114	0	-203	0	4,066	0	-1,778	51,938
Motor Gasoline Blending Components	0	0	0	502	0	-961	0	1,875	0	-2,334	16,501
Aviation Gasoline Blending Components	0	0	0	50	0	0	0	-8	0	58	250
Finished Petroleum Products	299	173,528	3,595	4,474	0	-86,566	0	0	7,814	87,516	118,476
Finished Motor Gasoline	0	81,741	161	3,054	0	-53,734	0	0	11	31,211	46,196
Finished Leaded Motor Gasoline	0	34,951	(s)	2,244	0	-22,715	0	0	11	14,469	21,982
Finished Unleaded Motor Gasoline	0	46,790	161	810	0	-31,019	0	0	0	16,742	24,214
Finished Aviation Gasoline	68	254	0	-57	0	-214	0	0	0	51	720
Naphtha-Type Jet Fuel	0	3,016	0	12	0	-1,052	0	0	0	1,976	2,488
Kerosene-Type Jet Fuel	1	11,902	30	1,009	0	-10,984	0	0	0	1,958	10,705
Kerosene	3	2,057	264	268	0	-398	0	0	(s)	2,194	2,041
Distillate Fuel Oil	1	31,106	5	1,225	0	-17,184	0	0	(s)	15,153	26,023
Residual Fuel Oil	0	11,850	1,566	-669	0	-1,509	0	0	3,391	7,847	13,419
Naphtha and Other Oils for Petro. Feed.	0	11,362	35	130	0	-94	0	0	627	10,806	3,063
Special Naphthas	109	1,234	245	-271	0	-374	0	0	29	914	1,752
Lubricants	0	2,403	(s)	250	0	-435	0	0	337	1,881	5,694
Waxes	0	213	18	9	0	-3	0	0	10	227	446
Petroleum Coke	0	4,509	0	38	0	0	0	0	3,390	1,157	886
Asphalt and Road Oil	0	3,746	0	-559	0	-432	0	0	(s)	2,755	4,229
Still Gas	0	7,207	0	0	0	0	0	0	0	7,207	0
Miscellaneous Products	117	928	1,270	35	0	-153	0	0	17	2,180	814
total	158,806	178,157	57,132	-14,474	-21,847	-70,427	8	172,664	10,312	104,364	731,505

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 9. PAD District IV Supply and Disposition of Crude Oil and Petroleum Products, April 1983
(Thousands of Barrels)

Commodity	Supply					Disposition					
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 16,929	0	853	-15	-6,493	0	0	11,265	0	9	16,169
Natural Gas Liquids and LRGs	2,161	126	399	-54	0	-736	0	384	1	1,511	1,157
Liquefied Petroleum Gases	785	126	276	-26	0	139	0	265	1	1,034	548
Other Products ²	1,376	0	123	-28	0	-875	0	119	0	477	609
Other Liquids	8	0	0	171	0	0	0	-260	0	439	5,339
Other Hydrocarbons and Alcohol	8	0	0	0	0	0	0	8	0	0	0
Unfinished Oils	0	0	0	-240	0	0	0	-767	0	527	3,014
Motor Gasoline Blending Components	0	0	0	411	0	0	0	499	0	-88	2,325
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0
Finished Petroleum Products	19	11,531	13	464	0	-179	0	0	4	11,843	13,489
Finished Motor Gasoline	16	6,302	7	53	0	-229	0	0	0	6,149	5,556
Finished Leaded Motor Gasoline	15	3,993	7	-39	0	-188	0	0	0	3,788	3,631
Finished Unleaded Motor Gasoline	1	2,309	0	92	0	-41	0	0	0	2,361	1,925
Finished Aviation Gasoline	0	25	0	-10	0	18	0	0	0	33	67
Naphtha-Type Jet Fuel	0	311	0	84	0	-138	0	0	0	257	259
Kerosene-Type Jet Fuel	0	624	0	51	0	456	0	0	0	1,131	723
Kerosene	0	0	0	10	0	0	0	0	0	10	29
Distillate Fuel Oil	0	2,811	4	515	0	-286	0	0	0	3,044	2,751
Residual Fuel Oil	0	275	(s)	-8	0	0	0	0	0	267	453
Naphtha and Other Oils for Petro. Feed.	0	1	0	-1	0	0	0	0	2	-2	2
Special Naphthas	0	4	(s)	0	0	0	0	0	1	3	10
Lubricants	0	36	(s)	-14	0	0	0	0	1	21	74
Waxes	0	11	0	2	0	0	0	0	0	13	5
Petroleum Coke	0	238	0	-51	0	0	0	0	(s)	187	882
Asphalt and Road Oil	0	477	0	-168	0	0	0	0	(s)	309	2,677
Still Gas	0	394	0	0	0	0	0	0	0	394	0
Miscellaneous Products	3	22	1	1	0	0	0	0	(s)	26	1
Total	19,117	11,657	1,265	566	-6,493	-915	0	11,389	5	13,802	36,154

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 10. PAD District V Supply and Disposition of Crude Oil and Petroleum Products, April 1983
(Thousands of Barrels)

Commodity	Supply				Disposition						
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil ¹	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 85,248	0	4,346	-598	542	-26,329	36	58,932	2,237	2,004	86,853
Natural Gas Liquids and LRGs	1,047	1,279	516	2	0	0	0	676	138	2,029	1,546
Liquefied Petroleum Gases	594	1,279	516	-9	0	0	0	465	138	1,776	1,494
Other Products ²	453	0	0	11	0	0	0	211	0	253	52
Other Liquids	289	0	27	2,984	0	0	0	2,755	0	545	31,955
Other Hydrocarbons and Alcohol	289	0	0	-1	0	0	0	288	0	0	7
Unfinished Oils	0	0	27	2,138	0	0	0	1,989	0	176	25,454
Motor Gasoline Blending Components	0	0	0	835	0	0	0	466	0	369	6,460
Aviation Gasoline Blending Components	0	0	0	12	0	0	0	12	0	0	34
Finished Petroleum Products	0	63,474	1,845	3,604	0	3,649	0	0	8,868	63,704	50,955
Finished Motor Gasoline	0	28,305	1,024	872	0	1,850	0	0	24	32,027	17,599
Finished Leaded Motor Gasoline	0	12,504	814	249	0	1,038	0	0	24	14,581	8,118
Finished Unleaded Motor Gasoline	0	15,801	210	623	0	812	0	0	0	17,446	9,481
Finished Aviation Gasoline	0	220	0	48	0	0	0	0	0	268	568
Naphtha-Type Jet Fuel	0	1,162	269	346	0	346	0	0	200	1,578	1,525
Kerosene-Type Jet Fuel	0	6,117	108	644	0	261	0	0	17	7,113	5,771
Kerosene	0	68	0	70	0	0	0	0	(s)	138	269
Distillate Fuel Oil	0	8,535	184	1,764	0	963	0	0	1,406	10,040	9,350
Residual Fuel Oil	0	10,632	420	-102	0	273	0	0	5,320	5,303	9,030
Naphtha and Other Oils for Petro. Feed	0	744	0	25	0	5	0	0	6	768	640
Special Naphthas	0	138	15	-63	0	7	0	0	1	96	325
Lubricants	0	388	72	-42	0	-32	0	0	78	392	1,292
Waxes	0	61	3	-8	0	0	0	0	3	53	70
Petroleum Coke	0	2,647	0	90	0	0	0	0	1,203	1,534	2,293
Asphalt and Road Oil	0	1,382	11	-104	0	0	0	0	8	1,281	1,995
Still Gas	0	2,929	0	0	0	0	0	0	0	2,929	0
Miscellaneous Products	0	146	8	57	0	-24	0	0	4	184	228
Total	86,584	64,753	6,734	5,992	542	-22,680	36	62,363	11,243	68,282	171,109

¹ Unaccounted for crude oil is a balancing item.

² Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 11. Production of Crude Oil (Including Lease Condensate) by PAD District and State, for the Most Current Available Month,¹ February 1983
(Thousands of Barrels)

PAD District and State	Production	
	Total	Daily Average
PAD District I		
Florida	1,767	63
New York	E 62	2
Pennsylvania	E 326	12
Virginia	4	(s)
West Virginia	259	9
Adjustment 2	-88	-3
Total PAD District I	E 2,330	83
PAD District II		
Illinois	2,319	83
Indiana	450	16
Kansas	5,462	195
Kentucky	649	23
Michigan	2,514	90
Missouri	E 15	1
Nebraska	509	18
North Dakota	3,983	142
Ohio	E 1,117	40
Oklahoma	13,337	476
South Dakota	89	3
Tennessee	76	3
Adjustment 2	-1,607	-57
Total PAD District II	E 28,913	1,033
PAD District III		
Alabama	1,511	54
Arkansas	E 1,446	52
Louisiana	E 32,994	1,178
Gulf Coast	2,670	95
Rest Of State	E 35,664	1,274
Total Louisiana	2,418	86
Mississippi		
New Mexico	492	18
Northwestern	5,272	188
Southeastern	5,764	206
Total New Mexico		
Texas	1,934	69
TRRC District 01	3,039	109
TRRC District 02	10,285	367
TRRC District 03	2,160	77
TRRC District 04	653	23
TRRC District 05	3,301	118
TRRC District 06, excluding East Texas	2,581	92
TRRC District 07B	2,728	97
TRRC District 07C	17,848	637
TRRC District 08	17,654	631
TRRC District 08A	2,967	106
TRRC District 09	1,510	54
TRRC District 10	3,990	143
East Texas	E 70,650	2,523
Total Texas	-1,544	-55
Adjustment 2		
Total PAD District III	E 115,909	4,140
PAD District IV		
Colorado	E 2,340	84
Montana	2,261	81
Utah	E 1,797	64
Wyoming	E 8,974	321
Adjustment 2	90	3
Total PAD District IV	E 15,462	552
PAD District V		
Alaska		
South Alaska	2,004	72
North Slope	46,070	1,645
Adjustment for Alaska ²	229	8
Total Alaska	E 48,303	1,725
Arizona	21	1
California		
Central Coastal	5,873	210
East Central	18,853	673
North	14	1
South	6,082	217
Total California	30,822	1,101
Nevada	50	2
Adjustment for Arizona, California, and Nevada ²	671	24
Total PAD District V	E 79,867	2,852
United States Total	E 242,481	8,660

¹ Includes the following offshore production (thousands of barrels):

Alaska: 1,771;
California: Federal- 2,343, State- 2,991;
Louisiana: Federal- E 21,792, State- 1,792;
Texas: Federal- E 1,615, State- 138;
U.S. Total- 32,442.

² These adjustments are used to reconcile the national and PADD level sums of the State data with the independently estimated level sums of the State data shown in the Summary Statistics portion of this issue and with the PADD level figures published in a previous issue. Final data at the State, PAD District and national levels will be published without adjustments in the Petroleum Supply Annual.

(s) Less than 500 barrels.
Sources: See Explanatory Notes on Data Collection and Estimation.
E = Estimated.

Table 12. Natural Gas Processing Plant Production of Petroleum Products by PAD District, April 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States			
	East Coast #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Dist. IV Rocky Mt.	Dist. V West Coast	
Natural Gas Liquids	353	472	825	3	1,948	459	5,534	7,944	18,356	3,017	7,122	705	3,472	32,672	2,161	1,047	44,649
Natural Gasoline and Isopentane	44	34	78	0	62	74	1,059	1,195	1,997	1,237	1,157	92	304	4,787	311	379	6,750
Unfractionated Stream	37	138	175	3	760	82	-2,263	-1,418	9,016	-9,952	598	344	2,050	2,056	956	74	1,843
Plant Condensate	0	0	0	0	46	23	45	114	231	-661	20	17	5	-388	109	0	-165
Liquefied Petroleum Gases	272	300	572	0	1,080	280	6,693	8,053	7,112	12,393	5,347	252	1,113	26,217	785	594	36,221
Ethane	0	158	158	0	450	0	1,016	1,466	702	2,863	1,985	35	99	5,684	25	0	7,333
Propane	164	95	259	0	444	177	2,507	3,128	2,252	3,763	1,795	108	498	8,416	498	346	12,647
Butane	91	30	121	0	94	89	946	1,129	1,307	2,045	702	65	260	4,379	246	199	6,074
Butane-Propane Mixtures	0	0	0	0	1	0	8	9	54	41	1	12	0	108	11	35	163
Ethane-Propane Mixtures	0	0	0	0	39	0	1,824	1,863	2,227	2,413	327	0	170	5,137	0	3	7,003
Isobutane	17	17	34	0	52	14	392	458	570	1,268	537	32	86	2,493	5	11	3,001
Finished Petroleum Products	88	0	88	0	2	0	6	8	287	2	0	6	4	299	19	0	414
Finished Motor Gasoline	88	0	88	0	0	0	0	0	0	0	0	0	0	0	16	0	104
Finished Leaded Motor Gasoline	57	0	57	0	0	0	0	0	0	0	0	0	0	0	15	0	72
Finished Unleaded Motor Gasoline	31	0	31	0	0	0	0	0	0	0	0	0	0	0	1	0	32
Finished Aviation Gasoline	0	0	0	0	0	0	0	0	68	0	0	0	0	68	0	0	68
Naphtha-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1
Kerosene	0	0	0	0	0	0	0	0	1	0	0	0	2	3	0	0	3
Distillate Fuel Oil	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1
Special Naphthas	0	0	0	0	0	0	0	0	109	0	0	0	0	109	0	0	109
Miscellaneous Products	0	0	0	0	2	0	6	8	109	2	0	4	2	117	3	0	128
Total Production	441	472	913	3	1,950	459	5,540	7,952	18,643	3,019	7,122	710	3,476	32,970	2,180	1,047	45,062

¹ Production represents quantity of natural gas processing plant output less input to fractionating facilities.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 13. Refinery Input of Crude Oil and Petroleum Products by PAD District, April 1983
(Thousands of Barrels, Except Where Noted)

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States			
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La., Gulf Coast	No. La., Ark.	New Mexico		Total	Dist. IV Rocky Mt.	Dist. V West Coast
Crude Oil (including lease condensate)	29,508	2,338	31,846	1,357	53,681	7,065	19,566	81,669	14,133	82,286	55,455	5,374	2,123	159,371	11,265	58,932	343,083
Natural Gas Liquids																	
Natural Gasoline and Isopentane	35	0	35	0	449	124	793	1,366	873	1,923	336	50	106	3,288	79	211	4,979
Unfractionated Stream	0	0	0	0	0	0	0	0	0	0	85	0	0	85	0	0	85
Plant Condensate	0	0	0	0	96	0	10	106	0	513	0	196	1	710	40	0	856
Liquefied Petroleum Gases	113	13	126	43	1,465	176	545	2,229	332	938	1,473	84	38	2,865	265	465	5,950
Ethane	0	0	0	0	0	0	0	0	0	0	93	0	0	93	3	0	96
Propane	0	0	0	0	43	0	0	43	0	2	76	0	0	78	7	23	151
Butane	0	13	13	13	748	140	219	1,120	63	769	847	2	4	1,685	125	316	3,259
Butane-Propane Mixtures	0	0	0	0	1	0	0	1	5	34	168	0	9	216	81	0	298
Ethane-Propane Mixtures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Isobutane	113	0	113	30	673	36	326	1,065	264	133	289	82	25	793	49	126	2,146
Other Liquids																	
Other Hydrocarbons and Alcohol	111	0	111	0	379	0	21	400	0	203	209	0	0	412	8	288	1,219
Unfinished Oil (net)	2,885	41	2,926	41	-1,919	-40	-549	-2,467	86	2,268	1,504	108	100	4,066	-767	1,989	5,747
Motor Gasoline Blending																	
Components (net)	456	41	497	2	456	169	1,014	1,641	-382	1,295	986	-26	2	1,875	499	466	4,978
Aviation Gasoline Blending																	
Components (net)	0	0	0	0	28	0	-8	20	0	-3	-5	0	0	-8	0	12	24
Total Input to Refineries	33,108	2,433	35,541	1,443	54,635	7,494	21,392	84,964	15,042	89,423	60,043	5,786	2,370	172,664	11,389	62,363	366,921
Crude Oil Distillation																	
Gross Input (daily average)	1,001	78	1,079	48	1,827	250	660	2,784	488	2,823	1,866	189	71	5,438	388	1,974	11,664
Operable Capacity (daily average)	1,473	174	1,647	66	2,351	295	854	3,565	612	4,061	2,877	294	106	7,949	561	3,110	16,832
Operating Ratio (percent) ¹	68.0	44.8	65.5	72.8	77.7	84.7	77.3	78.1	79.7	69.5	64.9	64.4	67.7	68.4	69.2	63.5	69.3
Crude Oil Qualities																	
Sulfur Content, Weighted Average (percent)	1.03	.47	.99	.54	.87	1.66	.57	.86	.64	.92	.81	1.64	.78	.88	.98	1.00	.91
API Gravity, Weighted Average	29.38	42.01	30.30	37.01	31.30	26.38	37.49	32.44	37.93	31.96	34.05	30.38	39.60	33.28	32.11	25.71	31.47
Operable Capacity (daily average)																	
Operating	1,473	174	1,647	66	2,351	295	854	3,565	612	4,061	2,877	294	106	7,949	561	3,110	16,832
Idle	1,283	106	1,388	66	2,191	295	757	3,309	559	3,498	2,228	242	106	6,633	521	2,770	14,622
	190	69	259	0	160	0	96	256	53	563	648	52	0	1,316	39	340	2,210

¹ Represents gross input divided by operable capacity.
Note: Total may not equal sum of components due to independent rounding.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 14. Refinery Production of Petroleum Products by PAD District, April 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III			PAD District IV			United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Rocky Mts.	Dist. V West Coast
Liquefied Refinery Gases	1,292	23	1,315	30	1,610	260	447	2,347	197	2,565	1,716	73	78	4,629	126	1,279	9,696
For Petrochemical Feedstock Use	333	0	333	0	217	9	39	265	34	976	220	18	0	1,248	-5	324	2,165
For Other Uses	959	23	982	30	1,393	251	408	2,082	163	1,589	1,496	55	78	3,381	131	955	7,531
Ethane	13	0	13	0	0	0	0	0	0	530	4	0	0	534	0	-1	546
For Petrochemical Feedstock Use	0	0	0	0	0	0	0	0	0	181	0	0	0	181	0	0	181
For Other Uses	13	0	13	0	0	0	0	0	0	349	4	0	0	353	0	-1	365
Propane	1,142	23	1,165	30	1,614	224	472	2,340	194	2,091	1,405	43	43	3,776	137	730	8,148
For Petrochemical Feedstock Use	322	0	322	0	217	0	39	256	34	859	143	0	0	1,036	0	187	1,801
For Other Uses	820	23	843	30	1,397	224	433	2,084	160	1,232	1,262	43	43	2,740	137	543	6,347
Butane	137	0	137	0	-5	36	-25	6	3	-195	305	28	18	159	4	496	802
For Petrochemical Feedstock Use	11	0	11	0	0	9	0	9	0	-79	77	18	0	16	0	137	173
For Other Uses	126	0	126	0	-5	27	-25	-3	3	-116	228	10	18	143	4	359	629
Butane-Propane Mixtures	0	0	0	0	1	0	0	1	0	124	2	2	2	17	145	54	190
For Petrochemical Feedstock Use	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
For Other Uses	0	0	0	0	1	0	0	1	0	124	2	2	2	17	145	54	190
Isobutane for Petro. Feed. Use	0	0	0	0	0	0	0	0	0	15	0	0	0	15	-5	0	10
Finished Motor Gasoline	16,762	951	17,713	882	33,566	4,342	13,104	51,894	7,658	41,854	29,530	1,668	1,031	81,741	6,302	28,305	185,955
Finished Leaded Motor Gasoline	8,769	425	7,194	485	15,062	2,493	7,804	25,844	3,601	16,814	13,026	942	568	34,951	3,993	12,504	84,486
Finished Unleaded Motor Gasoline	9,993	526	10,519	397	18,504	1,849	5,300	26,050	4,057	25,040	16,504	726	463	46,790	2,309	15,801	101,469
Finished Aviation Gasoline	23	0	23	0	77	0	9	86	-1	117	138	0	0	254	25	220	608
Naphtha-Type Jet Fuel	281	44	325	15	430	96	314	855	739	1,175	403	244	455	3,016	311	1,162	5,669
Kerosene-Type Jet Fuel	916	0	916	109	3,071	387	624	4,191	804	5,071	5,982	4	41	11,902	624	6,117	23,750
Kerosene	375	27	402	0	124	23	36	183	42	1,165	967	2	-19	2,057	0	68	2,710
Distillate Fuel Oil	6,806	562	7,368	245	8,796	1,400	4,809	15,250	3,022	16,419	9,541	1,502	622	31,106	2,811	8,535	65,070
Residual Fuel Oil	3,199	163	3,362	36	1,612	217	263	2,128	618	6,313	4,445	420	54	11,850	275	10,632	28,247
Naphtha < 400 Deg. For Petro. Feed. Use	358	0	358	0	7	0	96	103	720	2,631	407	20	0	3,778	0	152	4,391
Other Oils > 400 Deg. For Petro. Feed. Use	6	0	6	0	382	0	1	383	2	3,990	3,560	32	0	7,584	1	592	8,566
Special Naphthas	1	10	11	0	147	0	154	301	7	1,054	25	148	0	1,234	4	138	1,688
Lubricants	280	362	642	0	462	0	279	741	13	1,464	600	326	0	2,403	36	388	4,210
Waxes	21	73	94	0	18	0	27	45	7	79	66	61	0	213	11	61	424
Petroleum Coke	1,080	16	1,096	23	1,921	300	684	2,928	264	2,395	1,775	65	10	4,509	238	2,647	11,418
Marketable	372	0	372	0	1,138	189	471	1,798	61	1,138	1,002	48	0	2,249	103	2,032	8,554
Catalyst	708	16	724	23	783	111	213	1,130	203	1,257	773	17	10	2,260	135	615	4,864
Asphalt and Road Oil	1,900	45	1,945	93	1,890	717	408	3,108	549	659	1,396	1,055	87	3,746	477	1,382	10,658
Still Gas	1,552	81	1,633	58	2,100	252	801	3,211	374	4,544	2,059	183	47	7,207	394	2,929	15,374
For Petrochemical Feedstock Use	229	0	229	0	2	0	0	2	4	455	111	0	0	570	10	116	927
For Other Uses	1,323	81	1,404	58	2,098	252	801	3,209	370	4,089	1,948	183	47	6,637	384	2,813	14,447
Miscellaneous Products	176	34	210	3	85	22	53	163	76	492	319	41	0	928	22	146	1,469
Fuel Use	9	19	28	0	1	0	13	14	0	0	277	0	0	277	3	27	349
Non-Fuel Use	167	15	182	3	84	22	40	149	76	492	42	41	0	651	19	119	1,120
Total Production	35,028	2,391	37,419	1,494	56,298	8,016	22,109	87,917	15,091	91,987	62,829	5,844	2,406	178,157	11,657	64,753	379,903
Processing Gain(-) or Loss(+) ¹	-1,920	42	-1,878	-51	-1,663	-522	-717	-2,953	-49	-2,564	-2,786	-58	-36	-5,493	-268	-2,390	-12,982

¹ Represents the arithmetic difference between input and output.

Note: See Explanatory Note on negative production.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 15. Percent Refinery Yield of Petroleum Products by PAD District,¹ April 1983

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		PAD District V		United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La., Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Finished Motor Gasoline ²	49.5	37.7	48.7	59.9	59.4	55.1	56.4	58.3	48.1	43.7	46.4	24.9	39.8	44.4	51.5	44.1	48.1
Finished Aviation Gasoline ³	.1	.0	.1	.0	.1	.0	.1	.1	.0	.1	.3	.0	.0	.2	.2	.3	.2
Liquefied Refinery Gases	4.0	1.0	3.8	2.1	3.1	3.7	2.4	3.0	1.4	3.0	3.0	1.3	3.5	2.8	1.2	2.1	2.8
Naphtha-Type Jet Fuel	.9	1.8	3.9	1.1	.8	1.4	1.7	1.1	5.2	1.4	.7	4.5	20.5	1.8	3.0	1.9	1.6
Kerosene-Type Jet Fuel	2.8	0	2.6	7.8	5.9	5.5	3.3	5.3	5.7	6.0	10.5	.1	1.8	7.3	5.9	10.0	6.8
Kerosene	1.2	1.1	1.2	0	2	3	2	2	3	1.4	1.5	.0	-.9	1.3	.0	.1	.8
Distillate Fuel Oil	21.0	23.6	21.2	17.5	17.0	19.9	25.3	19.3	21.3	19.4	16.8	27.4	28.0	19.0	26.8	14.0	18.7
Residual Fuel Oil	9.9	6.9	9.7	2.6	3.1	3.1	1.4	2.7	4.3	7.5	7.8	7.7	2.4	7.3	2.6	17.5	8.1
Naphtha < 400 Deg. F. Petro. Feed. Use	1.1	0	1.0	0	.0	0	.5	.1	5.1	3.1	.7	.4	0	2.3	0	.2	1.3
Other Oils > 400 Deg. F. Petro. Feed. Use	.0	.4	.0	0	.7	0	.0	.5	.0	4.7	6.3	.6	0	4.6	.0	1.0	2.5
Special Naphthas	.0	.0	.0	0	.3	0	.8	.4	.0	1.2	.0	2.7	0	.8	.0	.2	.5
Lubricants	.9	15.2	1.8	0	.9	0	1.5	.9	.1	1.7	1.1	5.9	0	1.5	.3	.6	1.2
Waxes	.1	3.1	.3	0	.0	0	.1	.1	.0	.1	.1	1.1	0	.1	.1	.1	.1
Petroleum Coke	3.3	.7	3.2	1.6	3.7	4.3	3.6	3.7	1.9	2.8	3.1	1.2	.4	2.8	2.3	4.3	3.3
Asphalt and Road Oil	5.9	1.9	5.6	6.7	3.7	10.2	2.1	3.9	3.9	.8	2.5	19.2	3.9	2.3	4.5	2.3	3.1
Still Gas	4.8	3.4	4.7	4.1	4.1	3.6	4.2	4.1	2.6	5.4	3.6	3.3	2.1	4.4	3.8	4.8	4.4
Miscellaneous Products	.5	1.4	.6	.2	.2	.3	.3	.2	.5	.6	.6	.7	0	.6	.2	.2	.4
Processing Gain(-) or Loss(+) ⁴	-5.9	1.8	-5.4	-3.6	-3.2	-7.4	-3.8	-3.7	-3	-3.0	-4.9	-1.1	-1.6	-3.4	-2.6	-3.9	-3.7

¹ Based on crude oil input and net reruns of unfinished oils.² Based on total finished motor gasoline output plus net output of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and alcohol.³ Based on finished aviation gasoline output plus net output of aviation gasoline blending components.⁴ Represents the difference between input and production.

Note: Totals may not equal sum of components due to independent rounding.

Note: See Explanatory Note on negative production.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 16. Imports of Crude Oil and Petroleum Products by PAD District, April 1983
(Thousands of Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) ^{1 2}	23,909	16,953	48,562	853	4,346	94,623
Natural Gas Liquids	325	2,250	371	399	516	3,860
Natural Gasoline and Isopentane	0	0	0	0	0	0
Plant Condensate	31	0	0	123	0	154
Liquefied Petroleum Gases	293	2,250	371	276	516	3,706
Ethane	0	923	0	0	0	923
Propane	259	770	0	178	259	1,466
Butane	34	557	0	98	257	946
Butane-Propane Mixtures	0	0	371	0	0	371
Ethane-Propane Mixtures	0	0	0	0	0	0
Other Liquids ¹	2,727	743	4,605	0	27	8,102
Unfinished Oils ¹	2,165	640	4,605	0	27	7,437
Motor Gasoline Blending Components	562	103	0	0	0	665
Aviation Gasoline Blending Components	0	0	0	0	0	0
Finished Petroleum Products	29,017	1,270	3,595	13	1,845	35,739
Finished Motor Gasoline	6,648	363	161	7	1,024	8,203
Finished Leaded Motor Gasoline	3,923	283	(s)	7	814	5,028
Finished Unleaded Motor Gasoline	2,724	80	161	0	210	3,176
Finished Aviation Gasoline	1	0	0	0	0	1
Naphtha-Type Jet Fuel	0	0	0	0	(s)	(s)
Kerosene-Type Jet Fuel	314	0	30	0	108	453
Bonded Aircraft Fuel	0	0	0	0	0	0
Other	314	0	30	0	108	453
Kerosene	296	0	264	0	0	560
Distillate Fuel Oil	1,958	34	5	4	184	2,185
Bonded Ships Bunkers	0	0	0	0	0	0
Other	1,958	34	5	4	184	2,185
Residual Fuel Oil	19,534	763	1,566	(s)	420	22,284
Bonded Ships Bunkers	0	0	0	0	0	0
Other	19,534	763	1,566	(s)	420	22,284
Naphtha < 400 Deg. for Petro. Feed. Use	6	46	35	0	0	87
Other Oils > 400 Deg. for Petro. Feed. Use	0	2	0	0	0	2
Special Naphthas	112	35	245	(s)	15	407
Lubricants	78	4	(s)	(s)	72	153
Waxes	5	1	18	0	3	26
Asphalt and Road Oil	62	7	0	0	11	80
Miscellaneous Products	5	15	1,270	1	8	1,298
Total imports	55,977	21,216	57,132	1,265	6,734	142,325

¹ Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, April 1983
(Thousands of Barrels)

Source	Crude Oil 1	LPG	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
All PAD Districts														
Arab OPEC														
Algeria	5,281	0	0	0	0	0	0	360	1,205	0	0	1,564	6,845	228
Saudi Arabia	5,412	0	0	0	0	0	0	0	0	0	0	0	5,412	180
United Arab Emirates	1	0	0	0	0	0	0	0	0	0	0	0	1	(s)
Subtotal Arab OPEC	10,694	0	0	0	0	0	0	360	1,205	0	0	1,564	12,258	409
Other OPEC														
Ecuador	1,745	0	0	0	0	0	0	0	0	0	0	0	1,745	58
Gabon	2,000	0	0	0	0	0	0	0	0	0	0	0	2,000	67
Indonesia	5,597	0	0	0	155	18	0	1	33	0	485	693	6,290	210
Nigeria	5,593	0	0	0	0	0	0	0	0	0	0	0	5,593	186
Venezuela	4,575	0	814	119	1,026	0	512	326	7,617	0	256	10,670	15,245	508
Subtotal Other OPEC	19,510	0	814	119	1,181	18	512	327	7,650	0	741	11,362	30,873	1,029
Other														
Angola	3,059	0	0	0	0	0	0	0	0	0	0	0	3,059	102
Australia	0	0	0	0	0	0	0	0	0	0	0	0	0	(s)
Bahamas	0	0	2,389	263	0	0	48	395	1,412	0	491	4,998	4,998	167
Brazil	0	0	0	0	254	0	0	0	666	0	3	923	923	31
Canada	7,386	3,335	173	103	631	37	0	265	1,239	133	252	6,168	13,554	452
Congo	1,232	0	0	0	0	0	0	0	176	0	4	181	1,413	47
France	0	0	0	0	0	0	0	(s)	0	0	(s)	0	0	(s)
Mexico	28,489	371	0	0	(s)	30	0	18	498	1	15	934	29,423	981
Netherlands	350	0	0	0	2,210	0	0	0	0	96	0	2,307	2,657	89
Netherlands Antilles	0	0	1,772	0	0	0	0	0	4,661	0	61	6,494	6,494	216
Norway	5,660	0	0	0	0	0	0	0	0	0	0	0	5,660	189
People's Republic of China	0	0	0	0	0	0	0	0	0	0	(s)	818	818	27
Peru	379	0	0	0	818	0	0	0	0	0	17	470	849	28
Puerto Rico	0	0	133	0	223	0	0	0	453	169	75	600	600	20
Romania	0	0	0	0	793	0	0	0	0	0	0	793	793	26
Syria	0	0	0	0	154	0	0	0	0	0	0	154	154	5
Trinidad and Tobago	2,307	0	37	0	0	0	0	0	201	0	17	255	2,562	85
Tunisia	498	0	0	0	0	0	0	0	0	0	0	0	498	17
United Kingdom	12,607	0	0	0	0	0	0	0	0	0	36	36	12,643	421
Virgin Islands	0	0	1,180	0	1,126	314	0	701	2,169	0	0	5,490	5,490	183
Yugoslavia	0	0	179	0	0	0	0	0	0	0	0	179	179	6
Zaire	640	0	0	0	0	0	0	0	0	0	0	0	640	21
Other Western Hemisphere														
Hemisphere	173	0	0	0	0	0	0	0	1,657	0	18	1,675	1,848	62
Other Eastern Hemisphere	1,639	0	758	179	815	53	0	120	297	7	72	2,301	3,940	131
Subtotal Other	64,419	3,706	6,623	546	7,023	435	48	1,498	13,429	407	1,061	34,775	99,194	3,306
Total Imports	94,623	3,706	7,437	665	8,203	453	560	2,185	22,284	407	1,802	47,702	142,325	4,744

See footnotes at end of table.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, April 1983
(Thousands of Barrels)
(continued)

Source	Crude Oil 1	LPG	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
PAD District I														
Arab OPEC														
Algeria	1,846	0	0	0	0	0	0	360	683	0	0	1,043	2,889	96
Saudi Arabia	1,806	0	0	0	0	0	0	0	0	0	0	0	1,806	60
Subtotal Arab OPEC	3,652	0	0	0	0	0	0	360	683	0	0	1,043	4,695	157
Other OPEC														
Gabon	1,281	0	0	0	0	0	0	0	0	0	0	0	1,281	43
Indonesia	1,292	0	0	0	0	0	0	0	0	0	0	0	1,292	43
Nigeria	1,757	0	0	0	0	0	0	0	0	0	0	0	1,757	59
Venezuela	2,208	0	0	119	1,026	0	248	326	7,267	0	(s)	8,986	11,194	373
Subtotal Other OPEC	6,538	0	0	119	1,026	0	248	326	7,267	0	(s)	8,986	15,524	517
Other														
Angola	659	0	0	0	0	0	0	0	0	0	0	0	659	22
Bahamas	0	0	0	263	0	0	48	395	1,412	0	0	2,118	2,118	71
Brazil	0	0	0	0	254	0	0	0	666	0	0	923	923	31
Canada	2	293	0	0	138	0	0	176	475	9	46	1,139	1,141	38
Congo	1,232	0	0	0	0	0	0	0	176	0	0	176	1,409	47
France	0	0	0	0	0	0	0	(s)	0	0	(s)	(s)	(s)	(s)
Mexico	2,564	0	0	0	0	0	0	0	373	0	0	373	2,937	98
Netherlands	0	0	0	0	2,210	0	0	0	0	0	0	2,210	2,210	74
Netherlands Antilles	0	0	993	0	0	0	0	0	4,093	0	61	5,146	5,146	172
Norway	2,980	0	0	0	0	0	0	0	0	0	0	0	2,980	99
Peru	379	0	0	0	0	0	0	0	453	0	0	453	832	28
Puerto Rico	0	0	133	0	223	0	0	0	0	95	75	526	526	18
Romania	0	0	0	0	793	0	0	0	0	0	0	793	793	26
Syria	0	0	0	0	154	0	0	0	0	0	0	154	154	5
Trinidad and Tobago	0	0	11	0	0	0	0	0	201	0	0	211	211	7
United Kingdom	4,662	0	0	0	1,126	0	0	0	2,169	0	1	4,663	4,663	155
Virgin Islands	0	0	850	0	0	314	0	701	0	0	0	5,160	5,160	172
Yugoslavia	0	0	179	0	0	0	0	0	0	0	0	179	179	6
Other Western Hemisphere	173	0	0	0	0	0	0	0	1,565	0	0	1,565	1,738	58
Other Eastern Hemisphere	1,068	0	0	179	724	0	0	0	0	7	(s)	911	1,979	66
Subtotal Other	13,718	293	2,165	442	5,622	314	48	1,272	11,584	112	187	22,039	35,758	1,192
Total Imports	23,909	293	2,165	562	6,648	314	296	1,958	19,534	112	187	32,068	55,977	1,866
PAD District II														
Arab OPEC														
Algeria	309	0	0	0	0	0	0	0	0	0	0	0	309	10
Subtotal Arab OPEC	309	0	0	0	0	0	0	0	0	0	0	0	309	10
Other OPEC														
Nigeria	1,054	0	0	0	0	0	0	0	0	0	0	0	1,054	35
Venezuela	0	0	512	0	0	0	0	0	0	0	0	512	512	17
Subtotal Other OPEC	1,054	0	512	0	0	0	0	0	0	0	0	512	1,566	52

See footnotes at end of table.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, April 1983

(Thousands of Barrels)

Source	Crude Oil 1	LPG	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distill. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Products 2	Total Products	Total Petroleum	Total (Daily Average)
PAD District II														
Other	6,231	2,250	127	103	363	0	0	34	763	35	74	3,751	9,982	333
Canada	0	0	0	0	0	0	0	0	0	0	0	0	0	(s)
France	0	0	0	0	0	0	0	0	0	0	0	0	0	210
Mexico	6,313	0	0	0	0	0	0	0	0	0	0	0	6,313	19
Norway	576	0	0	0	0	0	0	0	0	0	0	0	576	15
Trinidad and Tobago	450	0	0	0	0	0	0	0	0	0	0	0	450	67
United Kingdom	2,019	0	0	0	0	0	0	0	0	0	(s)	0	2,019	0
United Eastern Hemisphere	0	0	0	0	0	0	0	0	0	0	0	0	0	645
Subtotal Other	15,590	2,250	127	103	363	0	0	34	763	35	74	3,751	19,341	707
Total Imports	16,953	2,250	640	103	363	0	0	34	763	35	74	4,263	21,216	
PAD District III														
Arab OPEC	3,126	0	0	0	0	0	0	0	521	0	0	521	3,647	122
Algeria	3,606	0	0	0	0	0	0	0	0	0	0	0	3,606	120
Saudi Arabia	1	0	0	0	0	0	0	0	0	0	0	0	1	(s)
United Arab Emirates	6,732	0	0	0	0	0	0	0	521	0	0	521	7,254	242
Subtotal Arab OPEC														
Other OPEC	1,745	0	0	0	0	0	0	0	0	0	0	0	1,745	58
Ecuador	719	0	0	0	0	0	0	0	0	0	0	0	719	24
Gabon	516	0	0	0	0	0	0	0	0	0	485	485	1,001	33
Indonesia	2,782	0	0	0	0	0	0	0	0	0	0	0	2,782	93
Nigeria	2,110	0	302	0	0	0	264	0	350	0	255	1,172	3,282	109
Venezuela	7,872	0	302	0	0	0	264	0	350	0	740	1,657	9,528	318
Subtotal Other OPEC														
Other	2,399	0	0	0	0	0	0	0	0	0	0	0	2,399	80
Angola	0	0	0	0	0	0	0	0	0	0	(s)	0	0	(s)
Australia	0	0	2,389	0	0	0	0	0	0	0	491	2,880	2,880	96
Bahamas	0	0	45	0	0	0	0	0	0	73	0	118	118	4
Canada	0	0	0	0	0	0	0	0	0	0	4	4	4	(s)
Congo	0	0	0	0	0	0	0	0	0	0	(s)	0	0	(s)
France	19,612	371	0	0	(s)	30	0	5	125	1	1	533	20,145	672
Mexico	350	0	0	0	0	0	0	0	0	96	0	96	446	15
Netherlands	2,104	0	780	0	0	0	0	0	568	0	0	1,348	1,348	45
Netherlands Antilles	0	0	0	0	0	0	0	0	0	0	0	0	2,104	70
Norway	0	0	0	0	161	0	0	0	0	0	(s)	161	161	5
People's Republic of China	0	0	0	0	0	0	0	0	0	0	17	17	17	1
Peru	0	0	0	0	0	0	0	0	0	74	0	74	74	2
Puerto Rico	0	0	0	0	0	0	0	0	0	0	17	17	1,873	62
Trinidad and Tobago	1,857	0	0	0	0	0	0	0	0	0	0	0	498	17
Tunisia	498	0	0	0	0	0	0	0	0	0	35	35	5,961	199
United Kingdom	5,926	0	0	0	0	0	0	0	0	0	0	0	330	11
United Kingdom	0	0	330	0	0	0	0	0	0	0	0	0	640	21
Virgin Islands	640	0	0	0	0	0	0	0	0	0	0	0	0	1
Zaire	0	0	0	0	0	0	0	0	0	0	18	18	18	
Other Western Hemisphere	0	0	0	0	0	0	0	0	0	0	0	0	0	

See footnotes at end of table.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, April 1983
(Thousands of Barrels)
(continued)

Source	Crude Oil 1	LPG	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
PAD District III														
Other														
Other Eastern Hemisphere	572	0	758	0	0	0	0	0	2	0	0	760	1,332	44
Subtotal Other	33,958	371	4,303	0	161	30	0	5	695	245	583	6,393	40,350	1,345
Total Imports	48,562	371	4,605	0	161	30	264	5	1,566	245	1,323	8,571	57,132	1,904
PAD District IV														
Other														
Canada	853	276	0	0	7	0	0	4	(s)	(s)	124	412	1,265	42
Subtotal Other	853	276	0	0	7	0	0	4	(s)	(s)	124	412	1,265	42
Total Imports	853	276	0	0	7	0	0	4	(s)	(s)	124	412	1,265	42
PAD District V														
Other OPEC														
Indonesia	3,790	0	0	0	155	18	0	1	33	0	0	208	3,997	133
Venezuela	257	0	0	0	0	0	0	0	0	0	0	0	257	9
Subtotal Other OPEC	4,047	0	0	0	155	18	0	1	33	0	0	208	4,254	142
Other														
Canada	300	516	1	0	122	37	0	50	0	15	8	748	1,048	35
Mexico	0	0	0	0	0	0	0	13	0	0	14	27	27	1
People's Republic of China	0	0	0	0	657	0	0	0	0	0	0	657	657	22
Trinidad and Tobago	0	0	27	0	0	0	0	0	0	0	0	27	27	1
Other Western Hemisphere	0	0	0	0	0	0	0	0	92	0	0	92	92	3
Other Eastern Hemisphere	0	0	0	0	90	53	0	120	294	0	72	629	629	21
Subtotal Other	300	516	27	0	869	90	0	183	386	15	94	2,180	2,480	83
Total Imports	4,346	516	27	0	1,024	109	0	184	420	15	94	2,388	6,734	224

1 Includes crude oil imported for storage in the Strategic Petroleum Reserve.

2 Includes aviation gasoline, waxes, asphalt, lubricants, natural gasoline, isopentane, plant condensate, naphthas less than 400 degrees F, other oils greater than 400 degrees F and miscellaneous products.

(s) Less than 500 barrels or less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 18. Exports of Crude Oil and Petroleum Products by PAD District, April 1983
(Thousands of Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) ¹	0	393	0	0	2,237	2,630
Liquefied Petroleum Gases	146	705	2,498	1	138	3,487
Ethane	(s)	(s)	0	0	0	(s)
Propane	120	282	2,172	(s)	55	2,629
Butane	26	423	326	(s)	83	858
Butane-Propane Mixtures	0	0	0	0	0	0
Finished Motor Gasoline	2	1	11	0	24	38
Naphtha-Type Jet Fuel	0	0	0	0	200	200
Kerosene-Type Jet Fuel	(s)	0	0	0	17	17
Kerosene	(s)	(s)	(s)	0	(s)	1
Distillate Fuel Oil	2	0	(s)	0	1,406	1,408
Residual Fuel Oil	(s)	0	3,391	0	5,920	9,311
Naphtha < 400 Deg. for Petrochem. Feedstock	50	6	68	2	5	130
Other Oils > 400 Deg. for Petrochem. Feedstock	39	0	560	0	1	599
Special Naphthas	3	1	29	1	1	35
Lubricants	216	11	337	1	78	644
Waxes	4	1	10	0	3	18
Petroleum Coke	199	918	3,390	(s)	1,203	5,710
Asphalt	1	2	(s)	(s)	8	11
Miscellaneous Products	11	2	17	(s)	4	34
Total Product Exports	673	1,647	10,312	5	9,006	21,642
Total Exports	673	2,040	10,312	5	11,243	24,272

¹ Exports of crude oil are prohibited by law. However, some crude oil is exchanged with Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical Tracking System's count these exchanges and shipments as imports and exports.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 19. Exports of Crude Oil and Petroleum Products by Destination, April 1983
(Thousands of Barrels)

Destination	Crude Oil 1	LPG	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubri-cants	Waxes	Petro-leum Coke	Asphalt	Other	Total	Total (Daily Average)
Argentina	0	83	0	0	0	0	0	7	(s)	55	0	(s)	146	5
Australia	0	1	0	0	0	0	(s)	2	(s)	137	(s)	3	143	5
Bahamas	0	2	0	(s)	1	149	0	2	0	0	0	(s)	155	5
Bahrain	0	2	0	0	0	0	0	(s)	0	64	(s)	0	66	2
Belgium & Luxembourg	0	0	(s)	0	0	0	0	74	(s)	282	(s)	9	365	12
Brazil	0	(s)	0	0	0	0	(s)	9	(s)	0	0	(s)	10	(s)
Cameroon	0	0	0	0	0	0	0	0	0	30	0	0	30	1
Canada	393	711	21	0	6	75	3	59	3	538	9	23	1,841	61
Chile	0	1	0	0	0	0	(s)	1	(s)	1	0	1	3	(s)
China (Taiwan)	0	0	0	0	0	0	(s)	12	(s)	1	(s)	(s)	13	(s)
Colombia	0	(s)	0	0	0	0	0	8	(s)	0	0	(s)	9	(s)
Costa Rica	0	0	0	0	0	0	1	3	(s)	0	0	1	5	(s)
Denmark	0	19	0	0	0	0	0	(s)	0	0	0	0	19	1
Dominican Republic	0	73	0	0	0	0	0	1	0	0	0	1	75	2
Ecuador	0	34	0	0	0	0	0	1	(s)	0	0	1	36	1
Egypt	0	0	0	0	0	0	0	1	0	83	0	(s)	84	3
El Salvador	0	1	0	0	0	0	(s)	2	0	0	0	1	5	(s)
Finland	0	0	0	0	0	0	0	2	0	0	0	1	3	(s)
France	0	(s)	0	0	0	0	0	4	2	619	0	250	875	29
French Pacific Isl	0	0	0	0	49	0	0	(s)	0	0	(s)	0	49	2
Ghana	0	0	0	0	0	0	0	(s)	0	10	0	(s)	11	(s)
Greece	0	0	0	0	0	0	0	(s)	0	74	(s)	(s)	75	2
Guatemala	0	0	0	0	0	0	0	7	(s)	0	0	1	9	(s)
Guinea	0	(s)	0	0	0	0	0	1	0	0	0	0	1	(s)
Honduras	0	(s)	(s)	0	0	0	0	9	(s)	0	0	0	9	(s)
Hong Kong	0	1	0	0	0	65	1	1	(s)	0	(s)	3	71	2
India	0	0	0	0	0	0	0	3	(s)	0	0	1	5	(s)
Indonesia	0	0	0	200	0	0	(s)	41	0	0	(s)	0	241	8
Iran	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Israel	0	(s)	0	0	0	0	0	0	0	0	0	0	(s)	29
Italy	0	55	0	0	0	0	0	(s)	0	644	(s)	166	866	29
Ivory Coast	0	0	0	0	0	0	0	(s)	0	0	(s)	(s)	(s)	(s)
Jamaica	0	14	0	0	0	0	0	(s)	0	0	0	0	37	1
Japan	0	1,584	0	0	535	3,404	6	22	0	1,037	0	11	6,642	221
Jordan	0	0	0	0	0	0	0	63	0	0	0	0	2	(s)
Korea, Republic of	0	3	0	0	419	67	(s)	7	(s)	16	0	2	514	17
Kuwait	0	1	0	0	0	0	(s)	(s)	0	(s)	0	(s)	1	(s)
Lebanon	0	0	0	0	0	0	0	1	0	0	0	1	162	5
Libania	0	1	0	0	0	160	0	(s)	0	0	0	(s)	1	(s)
Malaysia	0	0	0	0	(s)	0	0	1	0	0	0	0	1	(s)
Mexico	0	364	4	17	(s)	0	1	59	1	47	0	4	496	17
Netherlands	0	286	0	0	0	235	9	21	(s)	177	0	155	884	29
Netherlands Antilles	0	0	0	0	1	200	0	1	0	0	(s)	(s)	202	7
New Zealand	0	0	0	0	0	0	(s)	1	(s)	0	0	(s)	1	(s)
Nicaragua	0	0	0	0	0	0	0	3	0	0	0	(s)	3	(s)
Nigeria	0	0	0	0	0	0	0	(s)	0	162	0	(s)	(s)	6
Norway	0	1	0	0	0	0	0	4	(s)	0	0	(s)	167	(s)
Pacific Trust Terr.	0	0	0	0	0	0	0	(s)	0	0	0	(s)	222	7
Panama	0	13	0	0	205	0	2	3	(s)	0	0	(s)	19	1
Peru	0	10	0	0	0	0	0	7	(s)	0	0	0	265	9
Philippines	0	0	0	0	0	0	1	1	(s)	0	0	0	82	3
Puerto Rico	0	49	0	0	0	261	(s)	18	1	0	0	14	95	3
Rep. of South Africa	0	1	0	0	(s)	0	0	33	4	57	(s)	0	0	3

See footnotes at end of table.

Table 19. Exports of Crude Oil and Petroleum Products by Destination, April 1983
(Thousands of Barrels)

Destination	Crude Oil 1	LPG	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubri-cants	Waxes	Petro-leum Coke	Asphalt	Other	Total	Total (Daily Average)
Saudi Arabia	0	2	0	0	0	0	(s)	20	0	0	0	5	28	1
Singapore	0	1	0	0	0	3,369	6	5	(s)	0	(s)	1	3,381	113
Spain	0	99	0	0	193	0	0	(s)	(s)	1,215	0	50	1,558	52
Sunnam	0	0	0	0	0	0	0	(s)	0	0	0	(s)	(s)	(s)
Sweden	0	0	0	0	0	0	(s)	8	(s)	0	0	1	9	(s)
Switzerland	0	1	0	0	0	336	0	(s)	(s)	155	0	3	495	17
Thailand	0	(s)	0	0	0	0	2	22	0	0	0	0	24	1
Trinidad and Tobago	0	1	0	0	0	0	0	1	0	0	0	0	1	(s)
Turkey	0	0	0	0	0	0	(s)	(s)	0	64	0	0	64	2
United Arab Emirates	0	0	0	0	0	0	(s)	(s)	0	0	(s)	1	1	(s)
United Kingdom	0	4	0	0	0	308	(s)	31	(s)	2	(s)	12	358	12
U.S.S.R.	0	0	0	0	0	0	0	29	0	0	0	0	29	1
Uruguay	0	0	0	0	0	0	0	1	0	0	0	(s)	1	(s)
Venezuela	0	4	0	0	0	0	0	3	(s)	55	0	0	63	2
Virgin Islands	1,763	0	0	0	0	340	0	(s)	0	0	0	0	2,103	70
West Germany	0	3	0	0	0	0	(s)	11	(s)	60	0	35	109	4
Yugoslavia	0	0	0	0	0	0	0	(s)	0	44	0	(s)	44	1
Other	474	60	11	0	0	344	(s)	17	(s)	80	(s)	1	987	33
Total	2,630	3,487	38	217	1,408	9,311	35	644	18	5,710	11	764	24,272	809

1 Exports of crude oil are prohibited by law. However, some crude oil is exchanged with Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical Tracking Systems count these exchanges and shipments as imports and exports.
(s) Less than 500 barrels or less than 500 barrels per day.
Note: Total may not equal sum of components due to independent rounding.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, April 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Rocky Mt.	Dist. V West Coast
Crude Oil (incl. lease condensate)																	
Refinery	—	—	14,947	—	—	—	—	13,754	—	—	—	—	—	54,001	2,759	24,729	110,190
Tank Farms and Pipelines	—	—	1,385	—	—	—	—	65,719	—	—	—	—	—	93,815	11,984	28,579	201,482
Leases	—	—	59	—	—	—	—	1,691	—	—	—	—	—	17,622	1,426	1,686	22,484
Strategic Petroleum Reserve ¹	—	—	0	—	—	—	—	0	—	—	—	—	—	317,735	0	0	317,735
Alaskan In-Transit	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	31,659	31,659
Total	—	—	16,391	—	—	—	—	81,164	—	—	—	—	—	483,173	16,169	86,653	683,550
Total Stocks, All Oils (excl. Crude Oil)																	
Refinery	33,318	2,975	36,293	975	44,070	7,250	17,811	70,106	9,513	77,703	43,927	4,840	1,321	137,304	14,513	61,397	319,613
Bulk Terminal	—	—	91,155	—	—	—	—	80,097	—	—	—	—	—	68,840	2,532	19,100	261,724
Pipeline	—	—	27,645	—	—	—	—	32,840	—	—	—	—	—	37,810	2,717	3,891	104,903
Natural Gas Processing Plant	108	62	170	0	215	48	772	1,035	1,897	1,448	764	59	210	4,378	223	68	5,874
Total	—	—	155,263	—	—	—	—	184,078	—	—	—	—	—	248,332	19,985	84,456	692,114
Natural Gasoline and Isopentane																	
Refinery	15	0	15	0	21	28	127	176	128	371	190	1	7	697	5	22	915
Bulk Terminal	—	—	13	—	—	—	—	1,238	—	—	—	—	—	1,527	1	3	2,782
Pipeline	—	—	0	—	—	—	—	194	—	—	—	—	—	655	24	5	878
Natural Gas Processing Plant	2	14	16	0	26	12	124	162	264	178	218	17	25	702	34	21	935
Total	—	—	44	—	—	—	—	1,770	—	—	—	—	—	3,581	64	51	5,510
Unfractionated Stream																	
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulk Terminal	—	—	0	—	—	—	—	1,133	—	—	—	—	—	1,386	0	0	2,519
Pipeline	—	—	0	—	—	—	—	263	—	—	—	—	—	2,651	491	0	3,405
Natural Gas Processing Plant	0	0	0	0	94	2	346	442	195	1,095	80	1	14	1,385	37	1	1,865
Total	—	—	0	—	—	—	—	1,838	—	—	—	—	—	5,422	528	1	7,789
Plant Condensate																	
Refinery	0	0	0	0	5	0	0	5	15	100	0	63	0	178	0	0	183
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	147	0	0	147
Natural Gas Processing Plant	0	0	0	0	3	4	3	10	33	25	10	5	0	73	17	0	100
Total	—	—	0	—	—	—	—	15	—	—	—	—	—	398	17	0	430
Liquefied Petroleum Gases																	
Refinery	421	11	432	134	1,128	121	538	1,921	167	3,839	1,995	31	20	6,052	331	866	9,602
Bulk Terminal	—	—	1,173	—	—	—	—	18,884	—	—	—	—	—	40,449	57	582	61,145
Pipeline	—	—	2,425	—	—	—	—	6,935	—	—	—	—	—	3,208	38	0	12,606
Natural Gas Processing Plant	86	48	134	0	91	30	299	420	1,136	148	456	35	170	1,945	122	46	2,667
Total	—	—	4,164	—	—	—	—	28,160	—	—	—	—	—	51,654	548	1,494	86,020
Ethane																	
Refinery	0	0	0	0	7	0	0	7	0	1,142	0	0	0	1,142	2	0	1,151
Bulk Terminal	—	—	0	—	—	—	—	663	—	—	—	—	—	1,857	0	0	2,520
Pipeline	—	—	0	—	—	—	—	1,146	—	—	—	—	—	279	0	0	1,425

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, April 1983
(Thousands of Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	United States
Ethane																	
Natural Gas Processing Plant	0	0	0	0	0	23	0	32	55	0	1	0	0	8	9	1	65
Total	--	--	0	--	--	--	--	1,871	--	--	--	--	--	3,287	3	0	5,161
Propane for Petrochemical Feedstock Use																	
Refinery	35	0	35	0	123	0	1	124	1	5	68	0	0	74	0	0	233
Bulk Terminal	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	0	0
Pipeline	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	--	--	35	--	--	--	--	124	--	--	--	--	--	74	0	0	233
Propane For Other Uses																	
Refinery	329	6	335	1	663	28	232	924	33	970	854	3	3	1,863	99	133	3,354
Bulk Terminal	--	--	1,049	--	--	--	--	11,046	--	--	--	--	--	16,287	56	194	28,632
Pipeline	--	--	2,341	--	--	--	--	3,702	--	--	--	--	--	1,243	3	0	7,289
Natural Gas Processing Plant	32	46	78	0	48	21	94	163	400	25	337	11	102	875	92	28	1,236
Total	--	--	3,803	--	--	--	--	15,835	--	--	--	--	--	20,268	250	355	40,511
Butane For Petro. Feed Use																	
Refinery	0	0	0	0	0	21	0	21	0	15	0	13	0	28	0	2	51
Bulk Terminal	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	0	0
Pipeline	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	--	--	0	--	--	--	--	21	--	--	--	--	--	28	0	2	51
Butane For Other Uses																	
Refinery	57	5	62	78	232	47	166	523	71	1,044	534	5	5	1,659	186	527	2,957
Bulk Terminal	--	--	124	--	--	--	--	2,250	--	--	--	--	--	9,240	1	255	11,870
Pipeline	--	--	64	--	--	--	--	1,051	--	--	--	--	--	320	0	0	1,435
Natural Gas Processing Plant	53	2	55	0	15	8	88	111	317	61	82	18	34	512	26	10	714
Total	--	--	305	--	--	--	--	3,935	--	--	--	--	--	11,731	213	792	16,976
Butane-Propane Mixtures For Petro. Feed Use																	
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulk Terminal	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	0	0
Pipeline	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	0	0
Butane-Propane Mixtures For Other Uses																	
Refinery	0	0	0	0	3	0	0	3	1	20	8	0	0	7	36	4	207
Bulk Terminal	--	--	0	--	--	--	--	498	--	--	--	--	--	--	27	0	554
Pipeline	--	--	0	--	--	--	--	20	--	--	--	--	--	647	0	29	667
Natural Gas Processing Plant	0	0	0	0	0	0	1	1	5	14	0	1	0	20	2	6	29
Total	--	--	0	--	--	--	--	522	--	--	--	--	--	730	6	199	1,457
Ethane-Propane Mixtures																	
Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulk Terminal	--	--	0	--	--	--	--	3,028	--	--	--	--	--	9,089	0	0	12,117
Pipeline	--	--	0	--	--	--	--	498	--	--	--	--	--	499	35	0	1,032
Natural Gas Processing Plant	0	0	0	0	0	0	67	67	342	0	0	0	18	360	0	0	427
Total	--	--	0	--	--	--	--	3,593	--	--	--	--	--	9,948	35	0	13,576

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, April 1983
(Thousands of Barrels) (continued)

Commodity	PAD District I				PAD District II				PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Rocky Mts.	Dist. V West Coast
Isobutane																	
Refinery	0	0	0	55	100	25	139	319	61	643	531	10	5	1,250	40	40	1,649
Bulk Terminal	—	—	0	—	—	—	—	1,399	—	—	—	—	—	3,949	0	104	5,452
Pipeline	—	—	20	—	—	—	—	518	—	—	—	—	—	220	0	0	758
Natural Gas Processing Plant	1	0	1	0	5	1	17	23	72	47	37	5	8	169	1	2	196
Total	—	—	21	—	—	—	—	2,259	—	—	—	—	—	5,588	41	146	8,055
Other Hydrocarbons and Alcohol																	
Refinery	44	0	44	0	123	0	0	123	1	88	23	0	0	112	0	7	286
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	44	—	—	—	—	123	—	—	—	—	—	112	0	7	286
Unfinished Oils																	
Refinery	3,304	289	3,593	46	3,244	151	1,306	4,747	747	7,737	5,692	161	85	14,422	539	4,342	27,643
Naphthas and Lighter	1,780	32	1,812	0	2,348	18	495	2,861	793	7,557	1,282	35	10	9,677	549	3,992	18,891
Kerosene and Lighter Gas Oils	5,437	320	5,757	103	5,745	258	1,929	8,035	866	12,214	6,258	270	110	19,718	994	11,534	46,038
Heavy Gas Oils	1,648	240	1,888	1	3,445	16	1,539	5,001	539	4,364	3,185	33	0	8,121	932	5,586	21,528
Residuum	12,169	881	13,050	150	14,782	443	5,269	20,644	2,945	31,872	16,417	499	205	51,938	3,014	25,454	114,100
Total	3,985	77	4,062	31	5,659	752	1,806	8,248	1,273	7,942	6,031	135	171	15,552	2,324	6,367	36,553
Refinery	—	—	99	—	—	—	—	18	—	—	—	—	—	890	1	93	1,101
Bulk Terminal	—	—	0	—	—	—	—	180	—	—	—	—	—	59	0	0	239
Pipeline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Natural Gas Processing Plant	—	—	4,161	—	—	—	—	8,446	—	—	—	—	—	16,501	2,325	6,460	37,893
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Aviation Gasoline Blending Components																	
Refinery	0	0	0	0	80	0	21	101	43	28	179	0	0	250	0	34	385
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	—	—	0	—	—	—	—	101	—	—	—	—	—	250	0	34	385
Total Finished Motor Gasoline																	
Refinery	4,263	149	4,412	92	6,572	1,541	2,941	11,146	1,762	9,101	5,141	755	200	16,959	2,528	6,863	41,908
Bulk Terminal	—	—	36,975	—	—	—	—	30,186	—	—	—	—	—	11,109	1,561	8,677	88,508
Pipeline	—	—	15,233	—	—	—	—	15,586	—	—	—	—	—	18,128	1,455	2,059	52,461
Total	20	0	20	0	0	0	0	56,918	—	—	—	—	—	—	—	—	—
Natural Gas Processing Plant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Finished Leaded Motor Gasoline																	
Refinery	1,706	78	1,784	44	3,156	941	1,674	5,815	820	4,359	2,421	457	95	8,152	1,640	2,838	20,229
Bulk Terminal	—	—	16,983	—	—	—	—	15,446	—	—	—	—	—	4,938	958	4,271	42,596
Pipeline	—	—	8,939	—	—	—	—	8,257	—	—	—	—	—	8,892	1,023	1,009	28,120
Natural Gas Processing Plant	13	0	13	0	0	0	0	0	0	0	0	0	0	0	10	0	23
Total	—	—	27,719	—	—	—	—	29,518	—	—	—	—	—	21,982	3,631	8,118	90,968

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, April 1983
(Thousands of Barrels) (continued)

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States				
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico		Total	Rocky Mt.	Dist. IV	PAD Dist. V
Finished Unleaded Motor Gasoline																		
Refinery	2,557	71	2,628	48	3,416	600	1,267	5,331	942	4,742	2,720	298	105	8,807	888	4,025	21,679	
Bulk Terminal	--	--	19,992	--	--	--	--	14,740	--	--	--	--	--	6,171	603	4,406	45,912	
Pipeline	--	--	6,294	--	--	--	--	7,329	--	--	--	--	--	9,236	432	1,050	24,341	
Natural Gas Processing Plant	7	0	7	0	0	0	0	0	0	0	0	0	0	0	2	0	9	
Total	--	--	28,921	--	--	--	--	27,400	--	--	--	--	--	24,214	1,925	9,481	91,941	
Finished Aviation Gasoline																		
Refinery	42	0	42	0	202	0	19	221	26	280	174	0	0	480	44	223	1,010	
Bulk Terminal	--	--	378	--	--	--	--	383	--	--	--	--	--	113	18	345	1,237	
Pipeline	--	--	0	--	--	--	--	50	--	--	--	--	--	21	5	0	76	
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	106	0	0	0	0	106	0	0	106	
Total	--	--	420	--	--	--	--	654	--	--	--	--	--	720	67	568	2,429	
Naphtha-Type Jet Fuel																		
Refinery	167	34	201	0	692	46	346	1,084	237	717	438	138	127	1,657	180	734	3,856	
Bulk Terminal	--	--	17	--	--	--	--	505	--	--	--	--	--	285	8	493	1,308	
Pipeline	--	--	167	--	--	--	--	155	--	--	--	--	--	546	71	298	1,237	
Total	--	--	385	--	--	--	--	1,744	--	--	--	--	--	2,488	259	1,525	6,401	
Kerosene-Type Jet Fuel																		
Refinery	1,262	0	1,262	42	1,457	113	156	1,768	291	2,422	1,971	3	17	4,704	394	3,219	11,347	
Bulk Terminal	--	--	4,904	--	--	--	--	3,217	--	--	--	--	--	1,680	195	1,981	11,977	
Pipeline	--	--	3,240	--	--	--	--	2,259	--	--	--	--	--	4,321	134	571	10,525	
Total	--	--	9,406	--	--	--	--	7,244	--	--	--	--	--	10,705	723	5,771	33,849	
Kerosene																		
Refinery	388	68	456	0	673	40	297	1,010	41	606	346	9	51	1,053	2	203	2,724	
Bulk Terminal	--	--	2,991	--	--	--	--	1,114	--	--	--	--	--	601	27	65	4,798	
Pipeline	--	--	284	--	--	--	--	113	--	--	--	--	--	384	0	1	782	
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	2	0	0	0	1	3	0	0	3	
Total	--	--	3,731	--	--	--	--	2,237	--	--	--	--	--	2,041	29	269	8,307	
Distillate Fuel Oils																		
Refinery	3,459	316	3,775	53	4,913	1,542	3,163	9,671	979	7,781	3,717	703	185	13,365	1,672	4,290	32,773	
Bulk Terminal	--	--	21,745	--	--	--	--	16,504	--	--	--	--	--	5,189	580	4,117	48,135	
Pipeline	--	--	6,289	--	--	--	--	7,075	--	--	--	--	--	7,467	499	943	22,273	
Distillate Fuel Oils																		
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	2	
Total	--	--	31,809	--	--	--	--	33,250	--	--	--	--	--	26,023	2,751	9,350	103,183	
Residual Fuel Oils																		
Refinery	2,614	117	2,731	55	1,650	155	115	1,975	379	4,653	3,502	251	52	8,837	453	7,197	21,193	
Bulk Terminal	--	--	17,540	--	--	--	--	1,466	--	--	--	--	--	4,581	0	1,819	25,406	
Pipeline	--	--	0	--	--	--	--	0	--	--	--	--	--	1	0	14	15	
Total	--	--	20,271	--	--	--	--	3,441	--	--	--	--	--	13,419	453	9,030	46,614	

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, April 1983
(Thousands of Barrels) (continued)

Commodity	PAD District I				PAD District II				PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Rocky Mt.	Dist. V West Coast
Naphtha < 400 Deg. Petro. Feedstock																	
	Refinery	36	0	36	0	52	0	82	134	152	1,057	550	41	0	1,800	0	276
	Total	36	0	36	0	52	0	82	134	152	1,057	550	41	0	1,800	0	276
Other Oils > 400 Deg. Petro. Feedstock																	
	Refinery	4	0	4	0	122	0	1	123	143	907	210	3	0	1,263	2	364
	Total	4	0	4	0	122	0	1	123	143	907	210	3	0	1,263	2	364
Special Naphthas																	
	Refinery	20	35	55	0	134	0	133	267	28	1,340	32	167	0	1,567	10	299
	Bulk Terminal	--	--	505	--	--	--	--	212	--	--	--	--	--	78	0	26
Natural Gas Processing Plant																	
	Refinery	0	0	0	0	0	0	0	0	107	0	0	0	0	107	0	0
	Total	--	--	560	--	--	--	--	479	--	--	--	--	--	1,752	10	325
Lubricants																	
	Refinery	1,009	1,004	2,013	0	771	0	573	1,344	41	3,491	1,262	563	0	5,357	71	676
	Bulk Terminal	--	--	1,389	--	--	--	--	847	--	--	--	--	--	337	3	616
Total	--	--	3,402	--	--	--	--	2,191	--	--	--	--	--	5,694	74	1,292	
Waxes																	
	Refinery	23	146	169	0	35	0	45	80	26	208	122	90	0	446	5	70
	Bulk Terminal	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	0
Pipeline																	
	Refinery	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	0
	Total	--	--	0	--	--	--	--	0	--	--	--	--	--	0	0	0
Natural Gas Processing Plant																	
	Refinery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	--	--	169	--	--	--	--	80	--	--	--	--	--	446	5	70
Petroleum Coke																	
	Refinery	744	0	744	0	828	42	943	1,813	0	84	602	200	0	886	882	2,293
	Total	744	0	744	0	828	42	943	1,813	0	84	602	200	0	886	882	2,293
Asphalt and Road Oil																	
	Refinery	2,403	104	2,507	417	4,100	2,423	1,232	8,172	796	551	908	1,149	286	3,690	2,596	1,744
	Bulk Terminal	--	--	3,384	--	--	--	--	4,335	--	--	--	--	--	539	81	251
Total	--	--	5,891	--	--	--	--	12,507	--	--	--	--	--	4,229	2,677	1,995	
Miscellaneous Products																	
	Refinery	250	33	283	1	71	4	4	80	40	265	117	39	0	461	0	196
	Bulk Terminal	--	--	42	--	--	--	--	55	--	--	--	--	--	76	0	32
Pipeline																	
	Refinery	--	--	7	--	--	--	--	30	--	--	--	--	--	222	0	0
	Total	--	--	7	--	--	--	--	30	--	--	--	--	--	222	0	0
Natural Gas Processing Plant																	
	Refinery	0	0	0	0	1	0	0	1	52	2	0	1	0	55	1	0
	Total	--	--	332	--	--	--	--	166	--	--	--	--	--	814	1	228
Total Stocks, All Oils	--	--	171,654	--	--	--	--	265,242	--	--	--	--	--	731,505	36,154	171,109	1,375,664

1 Includes 33,879 thousands of barrels of domestic crude oil.

Sources: See Explanatory Notes on Data Collection and Estimation.

-- Not Applicable.

Table 21. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, April 1983
(Thousands of Barrels)

Commodity	From I to			From II to			From III to			From IV to			From V to				
	II	III	V	I	III	IV	V	I	II	IV	V	II	III	I	II	III	IV
Crude Oil (Tanker and Barge only)	82	0	0	0	0	0	0	213	680	0	0	0	0	0	4,402	0	21,927
Petroleum Products	7,534	354	0	2,645	6,586	1,976	889	78,995	18,296	0	1,847	1,217	470	1,204	24	0	267
Natural Gasoline and Isopentane	0	0	0	0	95	0	0	0	354	0	0	11	0	0	0	0	0
Unfractionated Stream	0	0	0	0	609	0	0	0	711	0	0	394	470	0	0	0	0
Plant Condensate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Liquefied Petroleum Gases	0	0	0	465	2,331	139	0	1,472	4,699	0	0	0	0	0	0	0	0
Unfinished Oils	7	120	0	0	57	0	0	211	169	0	0	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0	0	961	0	0	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	5,480	0	0	1,460	2,317	1,118	185	48,469	6,722	0	860	518	0	829	24	0	0
Finished Leaded Motor Gasoline	3,066	0	0	668	1,296	628	99	20,454	3,088	0	469	322	0	494	24	0	0
Finished Unleaded Motor Gasoline	2,414	0	0	792	1,021	490	86	28,015	3,634	0	391	196	0	335	0	0	0
Finished Aviation Gasoline	0	0	0	0	24	18	0	121	117	0	0	0	0	0	0	0	0
Naphtha-Type Jet Fuel	112	0	0	0	63	0	0	667	151	0	297	89	0	49	0	0	0
Kerosene-Type Jet Fuel	147	0	0	178	55	503	0	9,339	1,482	0	218	4	0	43	0	0	0
Kerosene	19	0	0	10	0	0	0	388	10	0	0	0	0	0	0	0	0
Distillate Fuel Oil	1,731	0	0	253	779	198	305	15,343	2,245	0	375	201	0	283	0	0	0
Residual Fuel Oil	0	140	0	36	182	0	399	1,726	231	0	40	0	0	0	0	166	0
Naphtha and Other Oils for Petro.																	
Feedstock	34	0	0	9	0	0	0	80	9	0	5	0	0	0	0	0	0
Special Naphthas	0	0	0	0	0	0	0	295	72	0	7	0	0	0	0	0	0
Lubricants	0	94	0	37	54	0	0	535	80	0	45	0	0	0	0	77	0
Waxes	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	0	0	0	36	0	0	0	162	270	0	0	0	0	0	0	0	0
Miscellaneous Products	4	0	0	161	20	0	0	184	13	0	0	0	0	0	0	24	0
Total All Products	7,616	354	0	2,645	6,586	1,976	889	79,208	18,976	0	1,847	1,217	470	1,204	4,426	0	22,194

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 22. Movements of Petroleum Products by Pipeline between PAD Districts, April 1983
(Thousands of Barrels)

Commodity	From I to			From II to			From III to			From IV to			From V to		
	II	III	I	I	III	IV	I	II	IV	V	II	III	V	III	IV
Natural Gasoline and Isopentane	0	0	0	0	95	0	0	0	354	0	0	11	0	0	0
Unfractionated Stream	0	0	0	0	609	0	0	0	711	0	0	394	0	0	0
Plant Condensate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Liquefied Petroleum Gases	0	0	465	2,331	0	139	1,156	4,699	0	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0	961	0	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	4,079	0	1,187	2,317	0	1,118	35,873	5,586	0	860	518	0	829	0	0
Finished Lead Motor Gasoline	2,302	0	545	1,296	0	628	15,241	2,560	0	469	322	0	494	0	0
Finished Unleaded Motor Gasoline	1,777	0	642	1,021	0	490	20,632	3,026	0	391	196	0	335	0	0
Finished Aviation Gasoline	0	0	0	0	0	18	25	88	0	0	0	0	0	0	0
Naphtha-Type Jet Fuel	0	0	0	0	63	0	315	151	0	297	89	0	49	0	0
Kerosene-Type Jet Fuel	93	0	164	55	503	503	5,696	1,346	0	218	4	0	43	0	0
Kerosene	14	0	0	0	0	0	348	10	0	0	0	0	0	0	0
Distillate Fuel Oil	1,151	0	226	779	0	198	10,706	1,751	0	375	201	0	283	0	0
Residual Fuel Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Products	0	0	152	0	0	0	0	0	0	0	0	0	0	0	0
Total	5,337	0	2,194	6,249	0	1,976	54,119	15,657	0	1,750	1,217	0	1,204	0	0

Source: See Explanatory Notes on Data Collection and Estimation.

Table 23. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, April 1983
(Thousands of Barrels)

Commodity	From I to			From II to			From III to			From V to		
	II	III	V	I	III	V	I	New Eng	Cent Atl	Low Atl	II	I
Crude Oil	82	0	0	0	0	0	213	0	213	0	680	0
Petroleum Products	2,197	354	0	451	337	889	24,876	2,328	3,904	18,644	2,639	97
Liquefied Petroleum Gases	0	0	0	0	0	0	316	0	0	316	0	24
Unfinished Oils	7	120	0	0	57	0	211	0	211	0	169	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	1,401	0	0	273	0	185	12,596	555	697	11,344	1,136	0
Finished Aviation Gasoline	112	0	0	0	24	0	96	0	30	66	29	0
Naphtha-Type Jet Fuel	54	0	0	14	0	0	352	0	119	233	0	24
Kerosene-Type Jet Fuel	5	0	0	10	0	0	40	0	621	2,812	136	0
Kerosene	580	0	0	27	0	305	4,637	1,106	1,252	2,279	494	0
Distillate Fuel Oil	0	140	0	36	182	399	1,726	416	199	1,111	231	40
Residual Fuel Oil	34	0	0	9	0	0	80	0	70	10	9	5
Naphtha and Other Oils for Petro. Feed. Use	0	0	0	0	0	0	295	0	214	81	72	7
Special Naphthas	0	94	0	37	54	0	535	41	360	134	80	45
Lubricants	0	0	0	0	0	0	3	0	3	0	0	0
Waxes	0	0	0	0	0	0	0	0	19	143	270	0
Asphalt and Road Oil	0	0	0	36	0	0	162	0	109	75	13	0
Miscellaneous Products	4	0	0	9	20	0	184	0	0	0	0	0
Total	2,279	354	0	451	337	889	25,089	2,328	4,117	18,644	3,319	97
												4,426
												0
												22,194

Source: See Explanatory Notes on Data Collection and Estimation.

Table 24. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker and Barge Between PAD Districts, April 1983
(Thousands of Barrels)

Commodity	P.A.D. District I			P.A.D. District II			P.A.D. District III			P.A.D. District IV			P.A.D. District V		
	Receipts into PADD I	Shipments from PADD I	Net Receipts PADD I	Receipts into PADD II	Shipments from PADD II	Net Receipts PADD II	Receipts into PADD III	Shipments from PADD III	Net Receipts PADD III	Receipts into PADD IV	Shipments from PADD IV	Net Receipts PADD IV	Receipts into PADD V	Shipments from PADD V	Net Receipts PADD V
Crude Oil (Tanker and Barge only)	4,615	82	4,533	762	0	762	21,927	893	21,034	0	0	0	0	26,329	-26,329
Petroleum Products	81,664	7,888	73,776	27,047	12,096	14,951	7,677	99,138	-91,461	1,976	2,891	-915	3,940	291	3,649
Natural Gasoline	0	0	0	365	95	270	95	354	-259	0	11	-11	0	0	0
Unfractionated Stream	0	0	0	1,105	609	496	1,079	711	368	0	864	-864	0	0	0
Plant Condensate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Liquefied Petroleum Gases	1,937	0	1,937	4,699	2,935	1,764	2,331	6,171	-3,840	139	0	139	0	0	0
Unfinished Oils	211	127	84	176	57	119	177	380	-203	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	961	0	961	0	961	-961	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	49,953	5,480	44,473	12,720	5,080	7,640	2,317	56,051	-53,734	1,118	1,347	-229	1,874	24	1,850
Finished Leaded Motor Gasoline	21,146	3,066	18,080	6,476	2,691	3,785	1,296	24,011	-22,715	628	816	-188	1,062	24	1,038
Finished Unleaded Motor Gasoline	28,807	2,414	26,393	6,244	2,389	3,855	1,021	32,040	-31,019	490	531	-41	812	0	812
Finished Aviation Gasoline	121	0	121	117	42	75	24	238	-214	18	0	18	0	0	0
Naphtha-Type Jet Fuel	667	112	555	352	63	289	63	1,115	-1,052	0	138	-138	346	0	346
Kerosene-Type Jet Fuel	9,517	147	9,370	1,633	736	897	55	11,039	-10,984	503	47	456	261	0	261
Distillate Fuel Oil	398	19	379	29	10	19	0	398	-398	0	0	0	0	0	0
Residual Fuel Oil	15,596	1,731	13,865	4,177	1,535	2,642	779	17,963	-17,184	198	484	-286	963	0	963
Naphtha and Other Oils for Petro.	1,762	140	1,622	231	617	-386	488	1,997	-1,509	0	0	0	439	166	273
Feedstock Use	89	34	55	43	9	34	0	94	-94	0	0	0	5	0	5
Special Naphthas	295	0	295	72	0	72	0	374	-374	0	0	0	7	0	7
Lubricants	572	94	478	80	91	-11	225	660	-435	0	0	0	45	77	-32
Waxes	3	0	3	0	0	0	0	3	-3	0	0	0	0	0	0
Asphalt and Road Oil	198	0	198	270	36	234	0	432	-432	0	0	0	0	0	0
Miscellaneous Products	345	4	341	17	181	-164	44	197	-153	0	0	0	0	24	-24
Total All Products	86,279	7,970	78,309	27,809	12,096	15,713	29,604	100,031	-70,427	1,976	2,891	-915	3,940	26,620	-22,680

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 25. Production of Residual Fuel Oil By Sulfur Content, April 1983
(Thousands of Barrels)

Commodity	PAD District I			PAD District II				PAD District III				Total	PAD Dist. IV Rocky Mt.	PAD Dist. V West Coast	United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast					No. La., Ark.	New Mexico
Residual Fuel Oil	3,199	163	3,362	36	1,612	217	263	2,128	618	6,313	4,445	420	54	11,850	275	10,632	28,247
0.00 to 0.30% Sulfur	455	49	504	0	95	0	90	185	55	449	743	95	4	1,346	64	810	2,909
0.31 to 1.00% Sulfur	1,895	2	1,897	36	412	0	110	558	473	1,483	1,767	176	3	3,902	56	2,519	8,932
Greater Than 1.00% Sulfur	849	112	961	0	1,105	217	63	1,385	90	4,381	1,935	149	47	6,602	155	7,303	16,406

Source: See Explanatory Notes on Data Collection and Estimation.

Table 26. Stocks of Residual Fuel Oil By Sulfur Content, April 1983
(Thousands of Barrels)

Commodity	PAD District I		PAD District II					PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico		Total	Rocky Mt.	Dist. V West Coast
Residual Fuel Oil – 0.00 to 0.30% Sulfur																
Refinery	319	39	358	0	213	0	7	220	76	230	233	25	20	584	156	402
Bulk Terminal	—	—	3,597	—	—	—	—	82	—	—	—	—	—	49	0	0
Total	—	—	3,955	—	—	—	—	302	—	—	—	—	—	633	156	402
Residual Fuel Oil – 0.31 to 1.00% Sulfur																
Refinery	1,260	10	1,270	55	558	0	43	656	207	1,165	1,364	124	5	2,865	70	1,568
Bulk Terminal	—	—	5,868	—	—	—	—	439	—	—	—	—	—	2,542	0	422
Total	—	—	7,138	—	—	—	—	1,095	—	—	—	—	—	5,407	70	1,990
Residual Fuel Oil – Greater than 1.00% Sulfur																
Refinery	1,035	68	1,103	0	879	155	65	1,099	96	3,258	1,905	102	27	5,388	227	5,227
Bulk Terminal	—	—	8,075	—	—	—	—	945	—	—	—	—	—	1,990	0	1,397
Total	—	—	9,178	—	—	—	—	2,044	—	—	—	—	—	7,378	227	6,624
																25,451

Sources: See Explanatory Notes on Data Collection and Estimation.

— Not Applicable

Table 27. Movements of Residual Fuel Oil by Tanker and Barge Between PAD Districts, By Sulfur Content, April 1983
(Thousands of Barrels)

Commodity	From I to			From II to			From III to			From V to		
	II	III	V	I	III	V	I	New Eng	Cent Atl	Low Atl	II	III
Residual Fuel Oil	0	140	0	36	182	399	1,726	416	199	1,111	231	40
0.00 to 0.30% Sulfur	0	0	0	0	0	0	0	0	0	0	0	0
0.31 to 1.00% Sulfur	0	0	0	36	0	0	13	0	0	13	65	0
Greater Than 1.00% Sulfur	0	140	0	0	182	399	1,713	416	199	1,098	166	40
												0
												0
												0
												166

Source: See Explanatory Notes on Data Collection and Estimation.

Table 28. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, April 1983
(Thousands of Barrels)

Country	Residual Fuel Oil			
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%	Total
Arab OPEC				
Algeria	1,205	0	0	1,205
Iraq	0	0	0	0
Kuwait	0	0	0	0
Qatar	0	0	0	0
Saudi Arabia	0	0	0	0
United Arab Emirates	0	0	0	0
Subtotal Arab OPEC	1,205	0	0	1,205
Other OPEC				
Ecuador	0	0	0	0
Gabon	0	0	0	0
Indonesia	0	17	16	33
Nigeria	0	0	0	0
Venezuela	2,297	818	4,502	7,617
Subtotal Other OPEC	2,297	835	4,518	7,650
Other				
Angola	0	0	0	0
Australia	0	0	0	0
Bahamas	1,121	290	0	1,412
Bolivia	0	0	0	0
Brazil	341	326	0	666
Brunei	0	0	0	0
Canada	112	865	262	1,239
Congo	0	176	0	176
Egypt	0	0	0	0
France	0	0	0	0
Ghana	0	0	0	0
Liberia	0	0	0	0
Malaysia	0	0	0	0
Mexico	0	(s)	498	498
Netherlands	0	0	0	0
Netherlands Antilles	0	298	4,363	4,661
Norway	0	0	0	0
Oman	0	0	0	0
People's Republic of China	0	0	0	0
Peru	453	0	0	453
Puerto Rico	0	0	0	0
Romania	0	0	0	0
Spain	0	0	0	0
Syria	0	0	0	0
Trinidad	0	0	201	201
Tunisia	0	0	0	0
United Kingdom	0	0	0	0
Virgin Islands	242	544	1,383	2,169
Yugoslavia	0	0	0	0
Zaire	0	0	0	0
Other Western Hemisphere	92	1,393	172	1,657
Other Eastern Hemisphere	3	215	79	297
Subtotal Other	2,365	4,108	6,956	13,429
Other				
Total Imports	5,866	4,943	11,475	22,284

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 29. Imports of Residual Fuel Oil by Sulfur Content by State of Entry, April 1983
(Thousands of Barrels)

State	Residual Fuel Oil				Total
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%		
PAD District I	5,157	3,727	10,650		19,534
Connecticut	0	207	0		207
Florida	215	322	1,230		1,768
Georgia	0	0	135		135
Maine	0	329	1,148		1,476
Maryland	170	0	200		369
Massachusetts	0	209	1,382		1,591
New Jersey	708	766	1,102		2,576
New York	3,970	1,672	3,130		8,773
North Carolina	0	0	412		412
Pennsylvania	93	221	433		748
South Carolina	0	1	362		363
Vermont	0	0	0		0
Virginia	0	0	1,116		1,116
PAD District II	91	636	37		763
Illinois	0	237	0		237
Indiana	44	0	0		44
Michigan	0	202	0		202
Minnesota	0	0	22		22
North Dakota	0	0	15		15
Ohio	0	197	0		197
Wisconsin	47	0	0		47
PAD District III	526	348	693		1,566
Louisiana	4	0	693		697
Texas	521	348	0		869
PAD District IV	0	0	(s)		(s)
Montana	0	0	(s)		(s)
PAD District V	92	232	95		420
Arizona	0	0	0		0
California	92	0	0		92
Hawaii	(s)	232	95		328
All PAD Districts	5,866	4,943	11,475		22,284

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Glossary





Definitions of Petroleum Products and Other Terms

Alcohol. The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group; $\text{CH}-(\text{CH})_n-\text{OH}$. *Alcohol* includes methanol and ethanol.

Alkylation. A refinery process for chemically combining isoparaffin with olefin hydrocarbons. The product, alkylate, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

API Gravity. An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it may be calculated in terms of the following formula:

$$\text{Deg API} = \frac{141.5}{\text{sp gr } 60\text{F}/60\text{F}} - 131.5$$

Aromatics. Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene.

Asphalt. A dark-brown-to-black cement-like material, containing bitumens as the predominant constituents, obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. The conversion factor for asphalt is 5.5 barrels of 42 U.S. gallons per short ton.

ASTM. The acronym for the American Society for Testing and Materials.

Aviation Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation gasoline.

Aviation Gasoline, Finished. All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G-5572. Excludes blending components which will be used in blending or compounding into finished aviation gasoline.

Barrel. A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt and wax to barrels are given in the definitions for these products.

Barrels per Calendar Day. The maximum number of barrels of input that can be processed in a twenty-four hour period after making allowances for the following limitations: downstream limitations, environmental constraints, types and grades of inputs, planned and unplanned downtime, and types and grades of products.

Barrels Per Stream Day. The amount a unit can process running at full capacity under optimal crude and product slate conditions.

Bi-metallic. A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of two metals (e.g., platinum, rhenium).

Butane. A normally gaseous paraffinic hydrocarbon, C_4H_{10} . It is extracted from natural gas or refinery gas streams. Butane is covered by ASTM Specification D1835 and Gas Processors Association Specification for commercial butane.

Isobutane. A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 10.9 degrees F. This classification includes mixtures of gases that contain 80 percent liquid volume or more isobutane. It is extracted from natural gas and refinery gas streams.

Normal Butane. A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 31.1 degrees F. This classification includes mixtures of gases that contain 80 percent or more normal butane.

Other Butanes. All butanes not included as normal butane or isobutane.

Butane-Propane Mixtures. Mixtures consisting exclusively of butane and propane that conform to ASTM Specification D1835 and Gas Processors Association Specification for commercial butane-propane mixtures. They are extracted from natural gas and refinery gas streams.

Butylene. An olefinic hydrocarbon, C_4H_8 , recovered from refinery processes.

Catalytic Cracking. The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil.

Catalytic Hydrocracking. A refining process for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel and/or high grade fuel oil. Hydrocracking is an efficient, relatively low temperature process using hydrogen and a catalyst.

Catalytic Hydrotreating. A process for treating petroleum fractions (e.g., distillate fuel oil and residual fuel oil) and unfinished oils (e.g., naphthas, reformer feeds and heavy gas oil) in the presence of catalysts and substantial quantities of hydrogen to upgrade their quality.

Catalytic Reforming. The use of controlled heat and pressure with catalysts to effect the rearrangement of certain hydrocarbon molecules without altering their composition appreciably; the conversion of low-octane

gasoline fractions into higher octane stocks suitable for blending into finished gasoline; also the conversion of naphthas to obtain a more volatile product of higher octane number.

Conventional. A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of a metal and a non-metal (e.g., platinum, alumina).

Coal. A generic term applied to carbonaceous rocks that were formed by the partial or complete decomposition of vegetation. These stratified carbonaceous rocks are either solid or brittle and are highly combustible. Includes lignite, bituminous coal, and anthracite coal which conform to ASTM Specification D388.

Crude Distillation. The refining process of separating crude oil components by heating and subsequent condensing of the fractions by cooling.

Crude Oil (including Lease Condensate). A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite and oil shale. Drip gas is also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign according to the following:

Domestic. Crude oil produced in the United States or from its outer continental shelf as defined in 43 U.S.C. 1331.

Foreign. Crude oil produced outside the United States.

Delayed Coking. A process to produce low Conradson carbon gas for catalytic cracking feedstock and for gasoline.

Distillate Fuel Oil. A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1, No. 2, and No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuel.

No. 1 Fuel Oil. A light distillate fuel oil intended for use in vaporizing pot-type burners. ASTM Specification D396 specifies for this grade maximum distillation temperatures of 420 degrees F. at the 10-percent point and 550 degrees F. at the 90-percent point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100 degrees F.

No. 2 Fuel Oil. A distillate fuel oil for use in atomizing-type burners for domestic heating or for moderate capacity commercial-industrial burner units. ASTM

Specification D396 specifies for this grade distillation temperatures at the 90-percent point between 540 degrees and 640 degrees F., and kinematic viscosities between 2.0 and 3.6 centistokes at 100 degrees F.

No. 1 and No. 2 Diesel Fuel Oils. Distillate fuel oils used in compression-ignition engines, as given by ASTM Specification D975:

No. 1-D. A volatile distillate fuel oil with a boiling range between 300-575 degrees F. and used in high-speed diesel engines generally operated under wide variations in speed and load. Includes type C-B diesel fuel used for city buses and similar operations. Properties are defined in ASTM Specifications D975.

No. 2-D. A gas oil type distillate of lower volatility with distillation temperatures at the 90-percent point between 540-640 degrees F. for use in high-speed diesel engines generally operated under uniform speed and load conditions. Includes Type R-R diesel fuel used for railroad locomotive engines, and Type T-T for diesel-engine trucks. Properties are defined in ASTM Specification D975.

No. 4 Fuel Oil. A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D396 or Federal Specification VV-F-815C; its kinematic viscosity is between 5.8 and 26.4 centistokes at 100 degrees F. Also included is No. 4-D, a fuel oil for low- and medium-speed diesel engines that conforms to ASTM Specification D975.

Eastern Hemisphere. That half of the earth east of the Atlantic Ocean which includes Europe, Asia, Africa, and Australia. The Hawaiian Foreign Trade Zone is in this hemisphere.

Electric Energy (Purchased). Electricity purchased for refinery operations that is not produced within the refinery complex.

Ethane. A normally gaseous paraffinic compound (C₂H₆) extracted from natural gas and refinery gas streams. "Ethane" includes any products containing 90 percent liquid volume or more ethane.

Ethane-Propane Mixtures. Mixtures of ethane and propane in which neither component is 90 percent or more of the liquid volume. It is extracted from natural gas and refinery gas streams.

Ethylene. An olefinic hydrocarbon, (C₂H₄) recovered from refinery or petrochemical processes.

Field Production. Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, and new supply of other hydrocarbons and alcohol.

Fluid Coking. A thermal process utilizing the fluidized-solids technique for continuous conversion of heavy, low-grade oils into lighter products.

Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation or motor gasoline.

Gas Oil. A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. Derives its name from having originally been used in the manufacture of illuminating gas. Now supplies distillate-type fuel oils and diesel fuel, also cracked to produce gasoline.

Imported Crude Oil Burned as Fuel. The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. *Imported crude oil burned as fuel* includes lease condensate and liquid hydrocarbons produced from tar sand oil, gilsonite, and oil shale.

Isomerization. A refining process which alters the fundamental arrangement of atoms in the molecule. Used to convert normal butane into isobutane, an alkylation process feedstock, and normal pentane and hexane into isopentane and isohexane, high-octane gasoline components.

Kerosene. A petroleum distillate that boils at a temperature between 300-550 degrees F., that has a flash point higher than 100 degrees F. by ASTM Method D56, that has a gravity range from 40-46 degrees API, and that has a burning point in the range of 150-175 degrees F. Included are the two classifications recognized by ASTM D-3699: No. 1-K and No. 2-K, and all grades of kerosene called range or stove oil which have properties similar to No. 1 fuel oil, but with a gravity of about 43 degrees API and a maximum end-point of 625 degrees F. Kerosene is used in space heaters, cook stoves, and water heaters and is suitable for use as an illuminant when burned in wick lamps.

Kerosene-Type Jet Fuel. A quality kerosene product with an average gravity of 40.7 degrees API, a 10 percent distillation temperature of 400 degrees F. It is covered by ASTM Specification D1655 and Military Specifications MIL-T-5624L (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type; it is used primarily for commercial turbojet and turbo-prop aircraft engines.

Lease Condensate. A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

Liquefied Petroleum Gases (LPG). Propane, propylene, butanes, butylene, butane-propane mixtures, ethane-propane mixtures, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

Liquefied Refinery Gases (LRG). Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration they are retained in the liquid state. The reported categories are ethane and/or ethylene, propane and/or propylene, butane and/or butylene, butane-propane mixtures, and isobutane. Excludes still gases used for chemical or rubber manufacture which are reported as a petrochemical feedstock and also excludes liquefied gases ready for blending into gasoline which are reported as gasoline blending components. Liquefied refinery gases are reported for use as petrochemical feedstocks or other uses.

Lubricating Oils. A substance used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. *Lubricants* includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. The three categories include Bright Stock, Neutral, and Other.

Bright Stock. A refined, high viscosity lubricating oil base stock that is usually made from residue by a treatment such as deasphalting, acid treatment, or solvent extraction.

Neutral. A distillate lubricating oil base stock with a viscosity that is usually not above 550 Saybolt Universal Seconds (SUS) at 100 degrees F. It is prepared by a treatment such as hydrofining, acid treatment, or solvent extraction.

Other. A lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils.

Middle Distillates. A general classification that includes distillate fuel oil and kerosene.

Miscellaneous Products. Includes all finished products not classified elsewhere, e.g., petrolatum, absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, speciality oils and medicinal oils.

Motor Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished motor gasoline. Pool gasoline is included in this category.

Motor Gasoline, Finished. A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition engines. Specifications for motor gasoline, as given in ASTM Specification D439 or Federal Specification VV-G-1690B, include a boiling range of 122 degrees to 158 degrees F. at the 10-percent point to 365 degrees to 374 degrees F. at the 90-percent point and a Reid vapor pressure range from 9 to 15 psi. *Motor gasoline* includes finished leaded gasoline, finished unleaded gasoline, and gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Finished Leaded Gasoline. Contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon. The actual lead content of any given gallon, however, may vary as a function of the size of the producer and company according to specific Environmental Protection Agency waiver provisions. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Finished Unleaded Gasoline. Contains not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes unleaded gasohol. Blend stock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Gasohol. A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol) in which 10 percent or more of the product is alcohol.

Motor Gasoline, Total. Includes finished leaded motor gasoline, finished unleaded motor gasoline, motor gasoline blending components, and gasohol.

Naphtha-Type Jet Fuel. A fuel in the heavy naphtha boiling range with an average gravity of 52.8 degrees API and 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees F., meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

Natural Gas. A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

Natural Gas Field Facility. A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, butane, natural gasoline, etc., and to control the quality of natural gas to be marketed.

Natural Gas Plant Liquids. Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials, and are classified as follows: Ethane, propane, ethane-propane mix, isobutane, butane, butane-propane mix, isopentane, natural gasoline, plant condensate, unfractionated stream, and other products from natural gas processing plants (i.e., products meeting the standards of finished petroleum products produced at natural gas processing plants, such as finished

motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

Natural Gasoline and Isopentane. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, C₅H₁₂, obtained by fractionation of natural gasoline or isomerization of normal pentane.

OPEC. The acronym for the Organization of Petroleum Exporting Countries, oil-producing and exporting countries that have organized for the purpose of negotiating with oil companies on matters of oil production, prices, and future concession rights. Current members are Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

Operable Distillation Capacity. The maximum amount of input that can be processed by a crude oil distillation unit in a 24-hour period, making allowances for processing limitations due to types and grades of inputs, limitations of downstream facilities, scheduled and unscheduled downtimes, and environmental constraints. Includes any shutdown capacity that could be placed in operation within days.

Other Hydrocarbons. Materials received by a refinery and consumed as raw materials. Includes hydrogen, coal tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

Petrochemical Feedstock Use. Chemical feedstocks derived from petroleum, principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are *Naphtha-less than 400 degrees F. end-point* and *Other oils-over 400 degrees F. end-point*.

Naphtha-Less Than 400 Degrees F. End-Point. A naphtha with an end point of less than 400 degrees F. that is reported as used as a petrochemical feedstock.

Other Oils-Over 400 Degrees F. End-Point. Oils with an end point over 400 degrees F. that is reported as used as a petrochemical feedstock.

Petroleum Coke. A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is five barrels of 42 U.S. gallons per short ton.

Marketable Coke. Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This *green* coke may be sold or further purified by calcining.

Catalyst Coke. In many catalytic operations (i.e., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refinery process. This carbon or coke is not recoverable in a concentrated form.

Petroleum Products. Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, natural gasoline and isopentane, plant condensate, unfractionated stream, liquefied petroleum gases, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, naphtha less than 400° F. end-point, other oils-over 400° F. end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Petroleum Refinery. An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

Plant Condensate. One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

Primary Stocks. Stocks of crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tankfarms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in transit from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. *Primary Stocks* excludes stocks of foreign origin that are held in bonded warehouse storage.

Propane. A normally gaseous paraffinic compound, C₃H₈, which includes all products covered by NGPA Specification for commercial and HD-5 propane and ASTM Specification D1835. It is used primarily as a fuel and as a petrochemical feedstock.

Propylene. An olefinic hydrocarbon, C₃H₆, recovered from refinery or petrochemical processes.

Residual Fuel Oil. The topped crude of refinery operation which includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D396 and Federal Specification VV-F-815C, Navy Special fuel oil as defined in Military Specification MIL-F-859E including Amendment 2 (NATO Symbol F-77), and Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Includes imported crude oil to be burned as a fuel.

Road Oil. Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in

six grades from 0, the most liquid, to 5, the most viscous.

Special Naphthas. All finished products within the gasoline range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point and have a boiling range of 90 degrees to 220 degrees F. *Special naphthas* includes all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

Steam (Purchased). Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

Still Gas (Refinery Gas). Any form or mixture of gas produced in refineries by distillation cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, butane, butylene, propane, propylene, etc. Still gas is reported for petrochemical feedstock use and/or refinery fuel use.

Petrochemical Feedstock Use. Includes all refinery streams which are used by chemical or rubber manufacturing operations for further processing, less the amount of such streams returned to the source refinery. Finished petrochemical products are not included. For example, polyethylene, butadiene, etc., are considered petrochemical products; therefore, only their feed-stock equivalents are included.

Fuel Use. All other still gas.

Strategic Petroleum Reserve (SPR). Stocks (currently, only crude oil) maintained by the Federal Government for use during periods of major supply interruption.

Thermal Cracking. A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking is used to increase the yield of gasoline obtainable from crude oil.

Unfinished Oils. Includes all oils requiring further processing, except those requiring only mechanical blending.

Unfractionated Streams. Mixtures of unsegregated natural gas liquid components excluding those included in plant condensate. This product is extracted from natural gas.

Vacuum Distillation. Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique, with its relatively low temperatures, prevents cracking or decomposition of the charge stock.

Visbreaking. A thermal cracking process in which heavy vacuum-still bottoms produced on the primary

distillation unit are cracked to increase production of distillate products.

Wax. A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42-gallon barrel.

Microcrystalline Wax. Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics:

Penetration at 77 degrees F. (D-1321)-60 maximum.
Viscosity at 210 degrees F. in Saybolt Universal Sec-

onds (SUS) (D-88)-60 SUS (10.22 centistokes) minimum to 150 SUS (31.8 centistokes) maximum. Oil content (D-721)-5 percent minimum.

Crystalline-Fully Refined Wax. A light-colored paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D-88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D-721)-0.5 percent maximum. Other + 20 color, Saybolt minimum.

Crystalline-Other Wax. A paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D-88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D-721)-0.51 percent minimum to 15 percent maximum.

Western Hemisphere. That half of the earth that includes North and South America and the surrounding waters.

Bureau of Mines Petroleum Refining Districts and PAD Districts

The following are the Bureau of Mines petroleum refining districts which make up the PAD districts:

PAD District I

East Coast: District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

Appalachian #1: The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

PAD District II

Appalachian #2: The following counties of the State of Ohio: Erie, Huron, Crawford, Marion, Delaware, Franklin, Pickaway, Ross, Pike, Scioto, and all counties east thereof.

Indiana—Illinois—Kentucky: The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and that part of the State of Ohio not included in the Appalachian District.

Minnesota—Wisconsin—North and South Dakota: The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

Oklahoma—Kansas—Missouri: The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

PAD District III

Texas Inland: The State of Texas except the Texas Gulf Coast District.

Texas Gulf Coast: The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

Louisiana Gulf Coast: The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

North Louisiana—Arkansas: The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

New Mexico: The State of New Mexico.

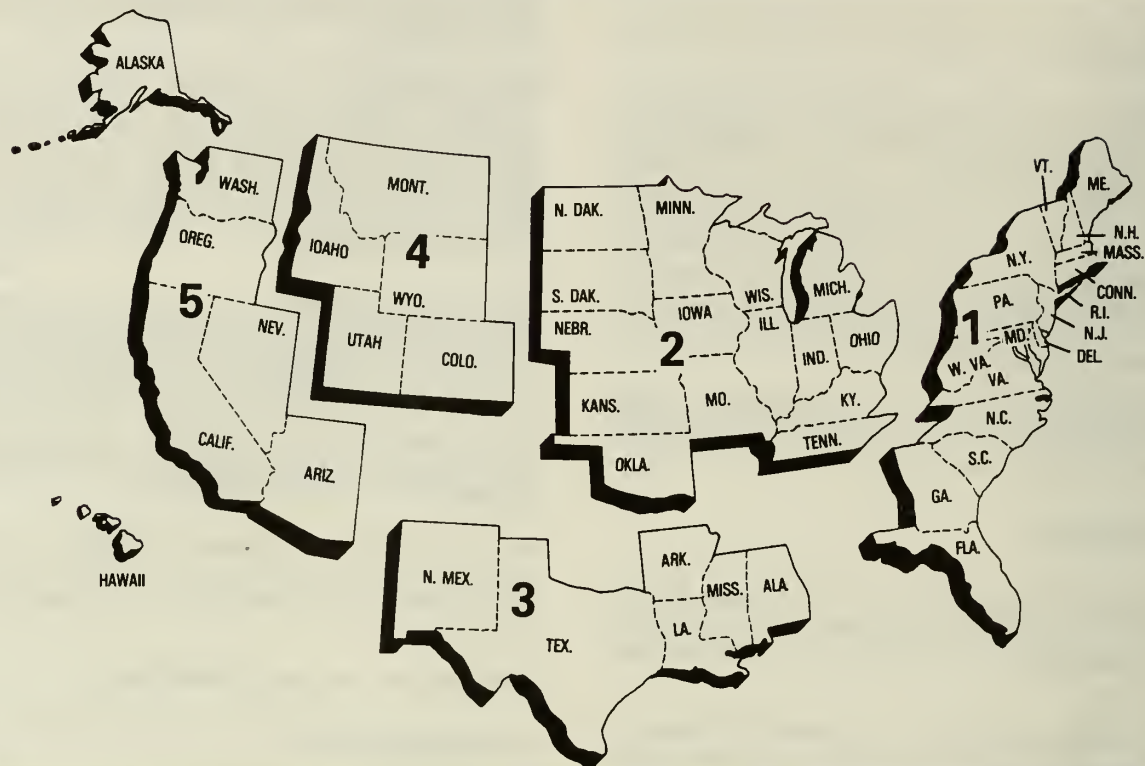
PAD District IV

Rocky Mountain: The States of Montana, Idaho, Wyoming, Utah, and Colorado.

PAD District V

West Coast: The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

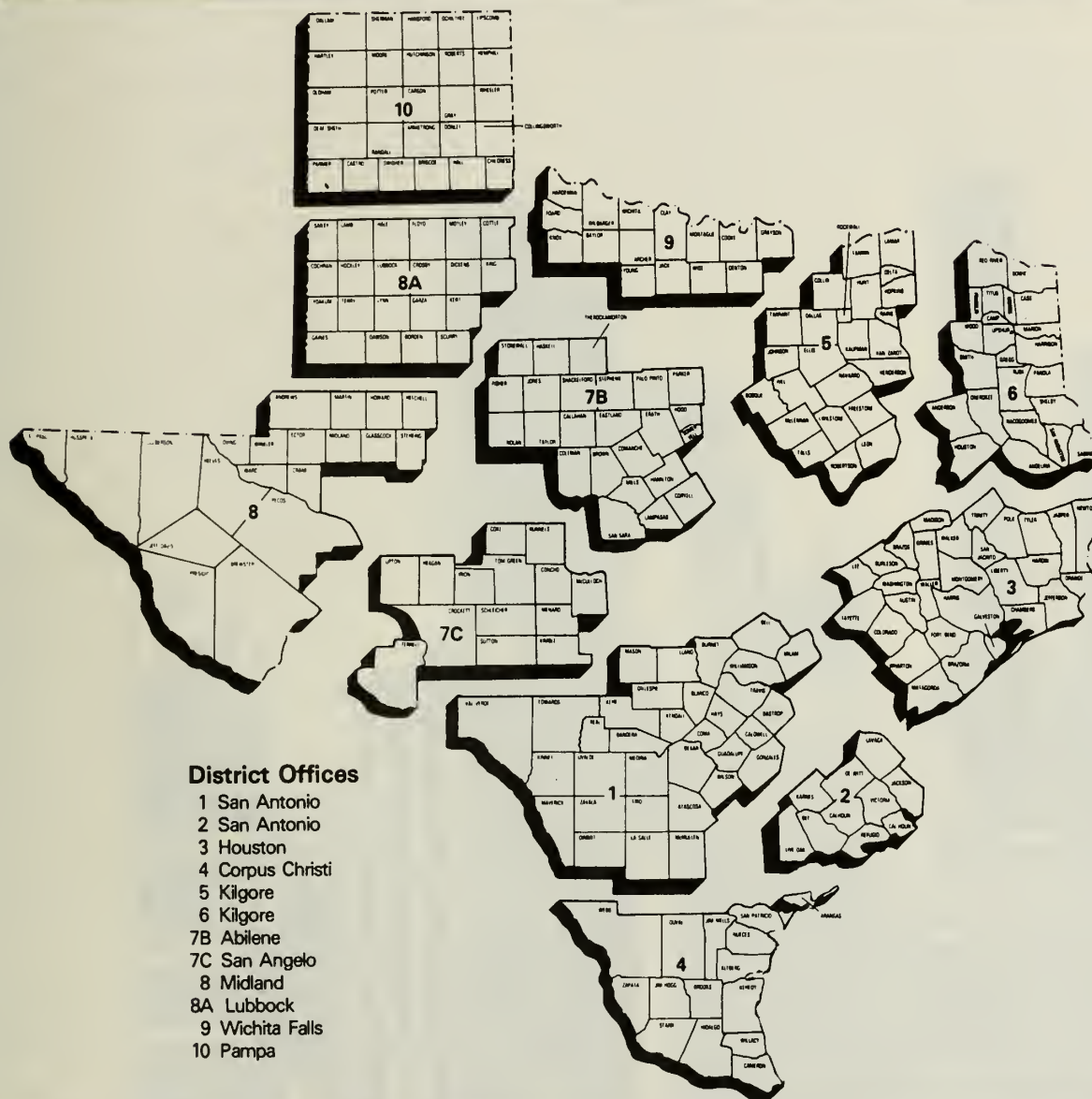
Petroleum Administration for Defense (PAD) Districts



Bureau of Mines Refining Districts

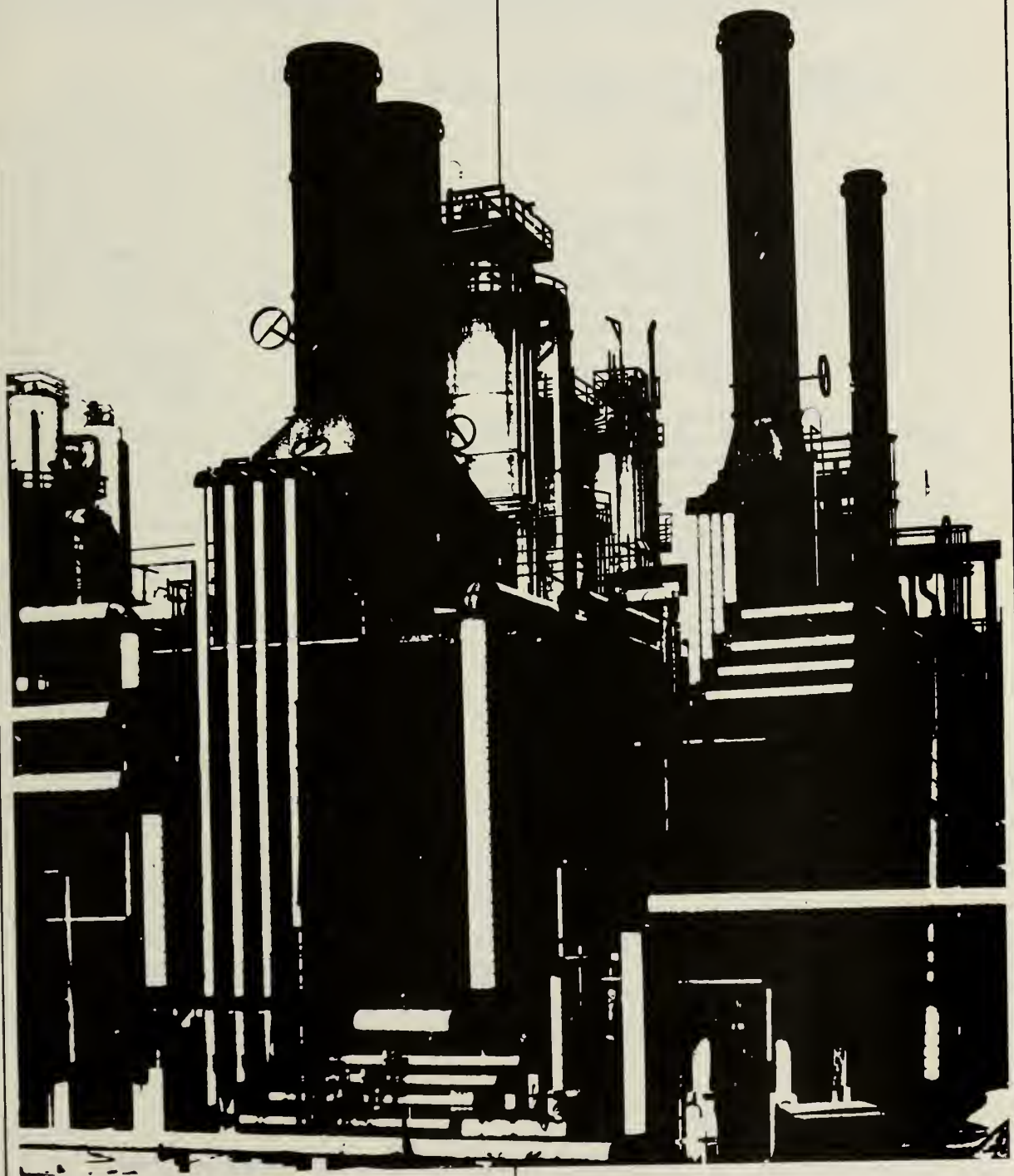


District Map Oil and Gas Division Railroad Commission of Texas





Explanatory Notes





Note 1: Data Collection Methodology

Background

Beginning in January 1983, the Energy Information Administration (EIA) unified its petroleum supply data collection activities into the Petroleum Supply Reporting System (PSRS). The PSRS represents a family of data collection survey forms, data processing systems and publication systems that have been consolidated to achieve comparability and consistency throughout. The primary focus of the consolidation has been to revise the weekly and monthly survey reporting forms to assure consistency in form layout, preparation instructions, and definitions. As a result, a new set of survey forms were implemented in January 1983. The following are the new form numbers and their corresponding predecessor forms:

New Form Number	Name	Old Form Number
EIA-800	Weekly Refinery Report	EIA-161
EIA-801	Weekly Bulk Terminal Report	EIA-162
EIA-802	Weekly Product Pipeline Report	EIA-163
EIA-803	Weekly Crude Oil Stocks Report	EIA-164
EIA-804	Weekly Imports Report	EIA-165
EIA-805	Weekly Shipments from Puerto Rico to the United States Report	—
EIA-810	Monthly Refinery Report	EIA-87
EIA-811	Monthly Bulk Terminal Report	EIA-88
EIA-812	Monthly Product Pipeline Report	EIA-89
EIA-813	Monthly Crude Oil Report	EIA-90
ERA-60	Monthly Imports Report	ERA-60
EIA-815	Monthly Shipments from Puerto Rico to the United States Report	FEA-P133-M-0
EIA-816	Monthly Natural Gas Liquids Report	EIA-64
EIA-817	Monthly Tanker and Barge Movement Report	EIA-170

Forms EIA-800 through 805 comprise the Weekly Petroleum Supply Reporting System (WPSRS). This system is designed to collect basic refinery operations and product stock data for major products on a weekly basis. Data from the WPSRS are published in the *Weekly Petroleum Status Report (WPSR)* and are also used to calculate the preliminary statistics in the "Summary Statistics" section of the *Petroleum Supply Monthly*

(PSM). A description of the WPSRS survey forms follows in Note 1.1.

Forms EIA-810-813, 815-817 and ERA-60 comprise the Monthly Petroleum Supply Reporting System (MPSRS). These surveys collect detailed refinery operations data, refinery, bulk terminal and pipeline stocks data, crude oil and petroleum product imports data and movements of petroleum products and crude oil between PAD Districts data. These surveys are the primary source of data for the "Summary Statistics" and "Detailed Statistics" sections of the PSM. A description of MPSRS survey forms follows in Note 1.2.

Data are also obtained in magnetic tape form from the Bureau of the Census on a monthly basis. These tapes contain aggregated import and export statistics that are used in the preparation of the PSM. A description of the Census data follows in Note 1.3.

Note 1.1: Weekly Petroleum Supply Reporting System (WPSRS)

Background

The EIA first began publishing weekly petroleum supply statistics in April 1979 in response to the Iranian oil crisis. Initially, the published data were taken from the American Petroleum Institute (API) *Weekly Statistical Bulletin*. However, in January 1980 the EIA began to publish weekly statistics from its own surveys, with the exception of imports statistics which the EIA did not begin collecting until June 1980.

The weekly surveys collect data comparable to those collected on a monthly basis. Selected petroleum companies report weekly data to the EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804, the importer of record reports each shipment entering the United States. On Form EIA-805, a company shipping unfinished oils and finished petroleum products into the United States from Puerto Rico reports each shipment. Current weekly data and the most recent monthly data are used to estimate the totals that are published in the *Weekly Petroleum Status Report*.

Sample Frame

The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Sampled companies report data only for facilities in the 50 States and District of Columbia.

The sample for each survey is taken from the following universe:

EIA-800: Based on the EIA-810 universe, which includes all petroleum refineries in the United States and

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its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and plants that produce finished motor gasoline through mechanical blending. The selected sample size is 215.

EIA-801: Based on the EIA-811 universe, which includes all bulk terminal facilities in the United States and its territories that have either a total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline. The selected sample size is 93.

EIA-802: Based on the EIA-812 universe, which includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including interstate, intrastate and intracompany pipeline movements. Pipeline companies that transport only natural gas liquids are not included in the EIA-802 frame. Only those pipeline companies that transport products covered in the weekly survey are included. The selected sample size is 65.

EIA-803: Based on the EIA-813 universe, which consists of all companies which carry or store crude oil of 1,000 barrels or more in the 50 States, and the District of Columbia. Included are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water.

EIA-804: Based on the ERA-60 universe, which includes all importers of record of crude oil and petroleum products into the United States and Puerto Rico. The selected sample size is 65.

EIA-805: Based on the EIA-815 universe, which includes all shippers of unfinished oils and petroleum products into the United States from Puerto Rico. Four companies report.

Sampling Method

The cut-off method is the sampling procedure used for all weekly surveys except the EIA-802, which uses the monthly universe in its entirety. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous 12-month period. Companies are chosen for the sampling, beginning with the largest and adding companies until the total sample covers 90 percent of the total for the previous time period for each product published in the *Weekly Petroleum Status Report*.

Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. The report period closes each Friday at 7 a.m. All canvassed firms and terminal operations companies must file by 5 p.m. on the following Monday.

Estimation and Imputation

After company reports have been checked and entered into the weekly data base, weekly totals for given products are estimated by using the following formula.

The total reported by all companies for the most recent month (M_t) is divided by the amount reported by the sample of companies for the most recent month (M_s). The result is multiplied by the amount reported by the sample of companies for the current week (W_s). The answer, W_t , is an estimate of the amount that would have been reported by all companies for the current week if all companies reported each week.

$$W_t = \frac{M_t}{M_s} (W_s)$$

This procedure is used to estimate total weekly inputs to refineries and production.

To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Therefore, an exponentially smoothed ratio has been developed. The estimate of weekly imports is the sum of the smoothed ratio multiplied by the weekly values and estimates for shipments from Puerto Rico. Imports of other oils includes an adjustment from Census data for unlicensed products because of coverage differences between the monthly imports data and Census data.

Explicit imputation is done for companies which do not respond in a given week. The imputed values are exponentially smoothed means of recent reports from the specific company.

Response Rates

The response rate for the published estimates is usually between 95 and 98 percent.

Note 1.2: Monthly Petroleum Supply Reporting System (MPSRS)

Background

The MPSRS was implemented in January 1983 as the result of an extensive effort to integrate the collection and processing of petroleum supply data that have been collected on other survey forms for many years. The collection of monthly petroleum supply statistics began as early as 1918 when the Bureau of Mines (BOM) began collecting data on refinery operations and crude oil stocks and movements. The collection systems

were further expanded to include natural gas plant liquids production and storage in 1925, imports of crude oil and petroleum products and storage and movements of petroleum products in 1959, and tanker and barge movements of crude oil and petroleum products in 1964. Since their inception, each survey has undergone numerous changes, but the MPSRS is the first effort to make them all consistent and comparable.

Respondent Frame

EIA-810: All petroleum refineries and plants that produce finished motor gasoline through the mechanical blending of liquids which are operated or controlled in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, the Hawaiian Foreign Trade Zone, and Guam. Approximately 313 respondents report on the EIA-810.

EIA-811: All bulk terminal facilities in the 50 States and the District of Columbia, Puerto Rico, and the Virgin Islands that (a) have a total bulk storage capacity of 50,000 barrels or more and/or (b) receive petroleum products by tanker, barge, or pipeline, regardless of ownership of the material. Approximately 328 respondents report on the EIA-811.

EIA-812: All products pipeline companies that carry petroleum products (including interstate, intrastate and intracompany pipelines) in the 50 States and the District of Columbia. Approximately 94 respondents report on the EIA-812.

EIA-813: All companies which carry or store crude oil of 1,000 barrels or more in the 50 States, and the District of Columbia. Included are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water.

EIA-815: All licensed importers and importers of record shipping petroleum products from Puerto Rico into the 50 States and the District of Columbia.

Import data from the ERA-60 and EIA-815 are integrated into the import statistics reported in the *PSM*.

EIA-816: All operators of facilities designed to extract liquid hydrocarbons from natural gas stream (natural gas processing plants) or to separate a hydrocarbon stream into its component products, i.e., propane, butane, natural gasoline, etc. (fractionators). Approximately 990 respondents report on the EIA-816.

EIA-817: All known companies and plants that have custody of crude oil and petroleum products transported by tanker and barge between PAD Districts or between PAD Districts and the Panama Canal. There are about 50 respondents.

ERA-60: All licensed importers and importers of record importing crude oil and petroleum products into the

United States and Puerto Rico. The respondent universe consisted of approximately 1,100 firms as of July 31, 1982. However, only a selected 250 importers must report each month regardless of import activity. All others must report only for a month in which they actually had imports. The respondent universe for this survey is updated whenever an import license is granted by the Office of Oil Imports of the ERA.

EIA utilizes a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review industry publications such as the *Oil and Gas Journal* and *LP Gas Almanac* for information on facilities or companies going into operation or closing down. These are augmented by articles in newspapers, letters from respondents indicating changes in status and information received from survey systems operated by other offices.

Periodically an extensive survey study is conducted to completely refresh the frames. This involves consolidating information from every known source including State agencies, federal agencies (e.g., EPA, Corps of Engineers, Census Bureau, etc.), and private industry directories. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

Collection Methods

The data for all of the MPSRS surveys are collected monthly. Completed forms are required to be postmarked by the 20th day following the end of the report month, with the exception of the EIA-815 and ERA-60 which are due 15 work days following the end of the report month. Telephone follow-up calls are made to nonrespondents prior to the publication deadline, for their data. An automated mailing list is maintained and is used to monitor receipt of the forms.

Imputing Missing Data

Imputation is performed only for nonresponding companies that submitted reports the previous month. For such companies, previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. In the event that the previous month's data were estimated, the respondent is contacted and requested to submit estimates, if necessary, to be followed by submission of actual data. Data for nonrespondents on the EIA-815 and 817, and ERA-60 are not imputed.

Response Rates

As of the filing deadline, the response rates of the EIA-810 through EIA-813 respondents is over 90 per-

cent. The response rate for the EIA-816 is over 85 percent and for the EIA-817 it is 98 percent. All companies that have not responded are contacted by telephone. Although data are taken by telephone to expedite processing, a certified submission is still required. Names of companies that fail to file for 2 consecutive months are forwarded for further noncompliance action.

In July 1982, the ERA-60 survey had a response rate of 98 percent by the filing deadline. The universe was 1,100 firms at that time. (Because this is a dynamic survey, the universe is constantly changing.) Standard follow-up of nonrespondents is made to insure that all reports are received, since data are not imputed for nonrespondents. In addition, response is cross-checked with response on the Petroleum Licensing Decrementation System (PLDS), a listing of each month's importers. The response rate is generally 98 to 99 percent by the time the data are first published.

Note 1.3: Census Import (IM-145) and Export (EM-522 and EM-594) Data

Background

Each month the EIA purchases magnetic tapes of aggregated import and export statistics from the Bureau of the Census. These data provide the only source of export statistics and are used to augment the import data collected by the EIA. Export statistics and import data from the Census tapes on liquefied petroleum gases, bonded ships bunkers and military offshore use are published in the *PSM*.

Import Statistics (IM-145)

Coverage

The import statistics reflect both government and non-government imports of merchandise from foreign countries into the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico), without regard to whether or not a commercial transaction is involved. In general, the statistics record the physical movement of merchandise into the United States from foreign countries, with the exception of the following types of transactions that are excluded from the statistics:

1. Merchandise in-transit through the United States, when documented with Customs as an in-transit movement.
2. Shipments from anywhere to U.S. possessions and shipments from U.S. possessions to the United States. (U.S. possessions include Puerto Rico, the Virgin Islands, Guam, and American Samoa.)
3. U.S. merchandise that was held in foreign countries by the U.S. Armed Forces and is returned to the United States for the use of the Armed Forces.

Source of Import Information

The official U.S. import statistics are compiled by the Bureau of the Census from copies of the import entry and warehouse withdrawal forms that importers are required by law to file with Customs officials (Customs Forms 7501, 7505, and 7506).

Imported petroleum is reported as *Imports for Consumption*. Imports for consumption are a combination of entries for immediate consumption and withdrawals from warehouses for consumption. With certain exceptions as indicated above, these data generally reflect the total of commodities entered into U.S. consumption channels.

Country and Area of Origin

The country reported in the statistics as the country of origin is defined as the country where the merchandise was grown, mined, or manufactured. In instances where the country of origin cannot be determined, the transactions are credited to the country of shipment.

Export Statistics (EM-522 and EM-594)

Coverage

The export statistics reflect both government and non-government exports of domestic and foreign merchandise from the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico) to foreign countries, without regard to whether or not the exportation involves a commercial transaction. In general, the statistics record the physical movement of merchandise out of the United States to foreign countries, with the exception of the following types of transactions:

1. All shipments from U.S. possessions, regardless of whether the shipments are sent to the United States, to other U.S. possessions, or to foreign countries.
2. Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.
3. Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

Source of Export Information

The official U.S. export statistics are compiled by the Bureau of the Census primarily from copies of Shipper's Export Declarations. Exporters are required to file Shipper's Export Declarations with Customs officials. The only exceptions are those exporters who have been authorized to submit data directly to the Bureau of Census on magnetic tape, punched cards, or monthly Shipper's Summary Export Declarations.

Country and Area of Destination

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

Note 2: Supply

The components of petroleum supply are field production, refinery production, imports, and stock withdrawal or addition:

Field Production is the sum of crude oil production (including lease condensate), natural gas processing plant production, and new supply (field production) of other liquids used by refineries.

Crude oil production is estimated based on data received from State conservation and revenue agencies. For further explanation, see Explanatory Note 3.

Field production of natural gas plant liquids (NGPL), including finished petroleum products, is reported monthly on survey Form EIA-816, *Monthly Natural Gas Liquids Report*. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. For survey description and other detail, see Explanatory Note 1.2.

Refinery Production of LRGs, ethane, and finished petroleum products is reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published production of these products equals refinery production minus refinery input. Refinery production of unfinished oils and of motor and aviation gasoline blending components appears on a net basis under refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. It should also be noted that refineries do not export production of crude oil, natural gasoline, isopentane, unfractionated stream, plant condensate, or other hydrocarbons.

Imports of crude oil and petroleum products are reported monthly on Form ERA-60, *Report of Oil Imports into the United States and Puerto Rico*, and Form EIA-815, *Shipments of Refined Products (Including Unfinished Oils) from Puerto Rico to the United States*. In addition, the Census Bureau Tabulation IM-145 summarizes import data from Customs import declarations reported on Customs Forms 7501 and 7505. The most prominent difference between the EIA and Census systems appears in imports of liquefied petroleum gases

(LPG), where the Census data show a much higher level of imports than EIA data. This occurs because the ERA-60 respondent frame was built by monitoring importers of licensed products and LPGs are not licensed products. Therefore, respondents that import only LPGs have not been identified, and do not report these imports to the Department of Energy. Since these importers are required to file form 7501 with the U.S. Customs Service, EIA obtains data on imports of LPGs from Census Tabulation IM-145. Additional data taken from the IM-145 are relatively small quantities of naphtha- and kerosene-type jet fuels, distillate fuel oils, and residual fuel oils withdrawn from bonded storage for use in international trade and for military offshore use. Even though these duty-free fuels are stored on United States shores, they did not enter the United States for domestic consumption and therefore are not included in the ERA-60 reporting system.

Stock Withdrawal (+) or Addition (-) is calculated by subtracting stocks at the end of the month from stocks at the beginning of the same month. (Note: The beginning stocks of one month are equal to the ending stocks of the previous month.) A positive result (+) would represent a withdrawal from stocks and an increase in petroleum supplies distributed for domestic consumption. A negative result (-) would represent a buildup of stocks and a reduction in the amount of petroleum supplies distributed for domestic consumption. For a description of survey forms used to make stock withdrawal or addition calculations see Explanatory Note 5.

Unaccounted-for Crude Oil is a balancing item that represents the difference between crude oil supply and disposition.

Crude oil supply is the sum of field production, imports and stock withdrawals or additions. Crude oil disposition is the sum of exports, refinery input, losses and product supplied. Unaccounted-for crude oil is calculated by subtracting crude oil supplies from crude oil disposition. A positive result indicates that refiners and exporters reported use of more crude oil than was reported to have been available to them. (This occurs, for example, when imports are undercounted due to late reporting or other problems.) A negative result would indicate that more crude oil was reported to have been supplied to refiners and exporters than they reported used.

Note 3: Domestic Crude Oil Production

Data for the Crude Oil Production System (COPS) are reported to the Department of Energy by each of the State conservation agencies, which collect crude oil production values for tax purposes. The U.S. Geological Survey reports the volume of crude oil that is produced offshore in Federally-owned waters. With the exception of ten State conservation agencies, all of these reports are received monthly. After each calendar year, these monthly numbers are updated using the annual reports

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from the State conservation agencies and the U.S. Geological Survey. The ten States that do not report monthly values are Indiana, Kentucky, Missouri, Arkansas, Utah, New York, Ohio, Pennsylvania, West Virginia, and Wyoming. Monthly values are estimated for these States using the Individual linear trends of their historical annual crude oil production values.

There is a time lag of approximately 4 months between the end of the reporting month and the time when the monthly COPS information becomes available. Table 11 of this publication provides information on crude oil production for the most recent month for which COPS values are available. In order to present more timely crude oil production values, the EIA's Dallas Field Office prepares a series of State level estimates which are based on historical production patterns and are summed to obtain the monthly crude oil production values shown in the summary statistics of this publication.

The individual State level estimates are either exponential curve fitted projections based on recent data or are constant level projections based on the average production rate during a recent time period. In some cases, adjustments are made to these estimates based on additional information on expected changes in production rates supplied by a State agency, a trade association, or an individual field operator.

Note 4: Disposition

The components of petroleum disposition are crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

Crude Oil Losses is the sum of crude oil losses at refineries. Crude oil losses at refineries are reported on Form EIA-810, *Refinery Report*.

Refinery inputs of crude oil, natural gas plant liquids, and other liquids are reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published inputs of unfinished oils and of motor and aviation gasoline blending components equal refinery input minus refinery output. Refinery inputs of finished petroleum products are reported on a net basis under refinery production.

Exports of crude oil and petroleum products are compiled from Census Bureau tabulations EM-522 and EM-594. Exports include crude oil shipments to Puerto Rico, the Virgin Islands, and the Hawaiian Foreign Trade Zone, which are obtained from refinery receipts reported on Form EIA-810, by refineries located in these places.

Product supplied for each product is calculated by summing field production plus refinery production, plus imports, plus stock withdrawal or minus stock addition, minus crude oil losses (plus net receipts when calculated on a PAD District basis), minus re-

finery input, minus exports. This formula ensures that total disposition equals total supply.

Products supplied indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of that product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported, (2) data were misreported or reported late, (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of interdistrict movements was incomplete.

Product supplied for crude oil is the sum of crude oil burned on leases and by pipelines as fuel oil. These data are reported on EIA-813, *Monthly Crude Oil Report*. Prior to January 1983, crude oil burned on leases and by pipelines as fuel oil were reported as either distillate or residual fuel oil and included in product supplied for these products.

Note 5: Stocks

Primary stocks of crude oil are the sum of ending stocks reported monthly on Form EIA-810, *Monthly Refinery Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Crude oil held in the Strategic Petroleum Reserve is included unless otherwise noted. Alaskan crude oil in transit is also included. Stocks of crude oil are also reported weekly on Form EIA-800, *Weekly Refinery Report*, and on Form EIA-803, *Weekly Crude Oil Stocks Report*. Primary stocks of petroleum products are summed from data reported on Form EIA-816, *Monthly Natural Gas Liquids Report*, Form EIA-811, *Monthly Bulk Terminal Report*, and on Form EIA-812, *Monthly Product Pipeline Report*. Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or stocks held by consumers. Petroleum product stocks are also reported weekly on Form EIA-800, *Weekly Refinery Report*, Form EIA-801, *Weekly Bulk Terminal Report*, and Form EIA-802, *Weekly Crude Oil Stocks Report*. For survey descriptions and other details, see Explanatory Notes 1.1 - 1.3.

Note 6: Average Stock Levels

The graphs displaying monthly stock levels of crude oil, motor gasoline, distillate fuel oil, residual fuel oil, liquefied petroleum gases, and other products provide the user with recent data as well as a summary of data from January through December or from July through June for the most recent 3-year period. This summary takes the form of an *average range* that includes seasonal variation determined from a longer time period. The

average range represents the historical pattern; it is not a forecast.

These curves are updated semiannually (on April 1 and October 1), by basing the *average ranges* on a more recent time period. Each 3-year data series is adjusted by dropping the first 6 months and including the most recent 6 months.

For each data series, the monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of the Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive. The series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported stock levels. The intent of deseasonalization is to remove only seasonal variation from the data. Thus, a deseasonalized series would contain the same trends and irregularities as the original data. For crude oil stocks, the derived seasonal factors are very small relative to crude oil stock levels. Therefore, the seasonal factors for distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products are derived using monthly data from 1974-1980. For motor gasoline, the seasonal factors are based on monthly data from 1975, 1976, 1978, 1979 and 1980. In 1977, there was virtually no seasonal behavior in motor gasoline stocks. Monthly stock levels stayed at the same high level for the entire year. In addition, the seasonal patterns in 1973, 1974 and 1977 were not representative of the recent past, and these years were not used in the determination of seasonal patterns for motor gasoline stocks. Because of these differences in the year-to-year seasonal fluctuation of motor gasoline, the evidence for the illustrated seasonal patterns for crude oil, distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products is stronger than is the evidence for the illustrated seasonal patterns for motor gasoline.

In some cases, these seasonal patterns do not show a smooth transition from month to month. For example, the June factor for residual fuel oil is slightly less than the May and July values, making a bump in the curve. As there is little difference in the magnitude of these seasonal factors, it is possible that this variation is due to the small number of observations (7 years) and the data variability.

After seasonal factors are derived, the most recent 3-year period (from January through December or from July through June) is deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard error of the deseasonalized 36 months is calculated adjusting for extreme data points. The width of the *average range* is twice this standard error.

The upper curve of the *average range* is defined as the average plus the seasonal factors plus the standard error. The lower curve is defined as the average plus the seasonal factors minus the standard error.

Note 7: Movements

Movements of crude oil between PAD Districts are reported on Form EIA-817, *Monthly Tanker and Barge Movement Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Petroleum product movements are reported on Forms EIA-817 and EIA-812, *Monthly Product Pipeline Report*. Net receipts is the difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge. For survey descriptions and other detail, see Explanatory Note 1.2.

Note 8: Preliminary Monthly Statistics

Weekly data (Forms EIA-800, 801, 802, 803, and 804) are used to estimate the most recent monthly values for the *Summary Statistics* section. Since some of the weekly reporting periods overlap two adjacent months, it is necessary to use weighting factors in the calculation of the monthly values.

To estimate crude oil and petroleum product imports, crude oil input to refineries and production of petroleum products for a specific month, the weekly estimates are weighted by the number of days of that month included in each week, then summed.

End-of-month stock levels of crude oil and the major products (motor gasoline, distillate fuel oil, and residual fuel oil) are calculated in a similar manner, but use only the two weekly reporting periods that cover the end-of-week stocks before and after the end of the month. The end-of-month stock level is calculated by first calculating the stock change between the two weeks. The daily stock change between the two end-of-week stock levels is then calculated. This number is multiplied by the weighting factor of the earlier of the two weeks (the week that covers the last day of the month of interest). This change is added to the earlier of the two end-of-week stock levels to estimate the end-of-month stock level.

Preliminary monthly estimates of domestic crude oil production are calculated as described in Explanatory Note 3.

Note 9: Notes on Tables

Note 9.1 Crude Oil and Petroleum Products Overview statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Crude Oil and Petroleum Products Stock Withdrawal (+) or Addition (-), Petroleum Products Supplied, Total Imports, Crude Oil Imports, Total Exports, and Crude Oil Exports appear as labeled in Table 4. Total Production and Crude Oil Production appear under Field Production in Table 4.

- Natural Gas Plant Production is the sum of Natural Gas Liquids and Finished Petroleum Products Field Production in Table 4.

- Petroleum Products Imports is the sum of Natural Gas Liquids and LRGs, Other Liquids, and Finished Petroleum Products Imports in Table 4.

- Total Crude Oil and Petroleum Products Ending Stocks appear in thousands of barrels in Table 2.

Note 9.2 Crude Oil Supply and Disposition statistics on the referenced line appear in Table 1 of the Detailed Statistics, except where noted.

- Total Domestic Field Production, Alaskan Field Production, SPR Imports, Other Imports (synonymous with Imports Gross Excl. SPR), SPR and Other Primary Stocks Withdrawal (+) or Addition (-), Unaccounted For Crude Oil, Refinery Inputs, and Exports appear as labeled in Table 1.

- Crude losses and Product Supplied appear as labeled in Table 4.

- SPR Ending Stocks and Other Primary Ending Stocks (synonymous with stocks excluding SPR) appear in thousands of barrels in Table 1.

- Total Crude Oil Ending Stocks appear in thousands of barrels in Table 2.

- Total Imports appear in Table 4.

Note 9.3 Finished Motor Gasoline Supply and Disposition statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Unleaded Percent of Total Product Supplied represents the ratio of finished unleaded motor gasoline product supplied to total finished motor gasoline product supplied, multiplied by 100 and rounded to the nearest tenth.

- Ending Stocks appear in thousands of barrels in Table 2.

Note 9.4 Distillate and Residual Fuel Oil Supply and Disposition statistics on the referenced lines appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Ending Stocks appear in thousands of barrels in Table 2.

Note 9.5 Liquefied Petroleum Gases Supply and Disposition statistics represent the aggregation of statistics on ethane, propane, butane, butane-propane mixtures, ethane-propane mixtures, and isobutane. The statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stocks Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied appear as labeled in Table 4.

- Ending stocks appear in thousands of barrels in Table 2.

Note 9.6 Other Petroleum Products Supply and Disposition statistics represent the aggregation of statistics on natural gasoline, isopentane, unfractionated stream, plant condensate, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, and residual fuel oil. The statistics on the referenced line are aggregated from Table 4 of the Detailed Statistics, except where noted.

- Total Production is the aggregated sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied are aggregated from Table 4.

- Ending stocks are aggregated from ending stocks in thousands of barrels in Table 2.

Note 9.7 Table 1. U.S. Petroleum Balance

- Lines (1) through (3): Crude oil (including lease condensate) production for *Alaska*, *Lower 48 States*, and *Total U.S.* are calculated by calling the conservation agency in Alaska for Alaskan crude oil production during the month, estimating crude oil production in the United States (see Explanatory Note 3), and taking the difference to equal production in the Lower 48 States.

- Line (5): *SPR Imports* are reported on Survey Form ERA-60.

- Line (12): *Total Other Sources* equals crude oil stock withdrawal (+) or addition (-) plus unaccounted for crude oil minus crude losses in Table 2.

- Line (14): Natural gas plant liquids (NGPL) *Production* equals field production of natural gas liquids (NGL) plus field production of finished petroleum products in Table 2.

- Line (15): *NGPL Imports* equals the sum of the Im-

ports of natural gasoline and isopentane, unfractionated stream, and plant condensate imports in Table 2.

- Line (16): *NGPL Stock Withdrawal (+) or Addition (-)* is equal to the sum of stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate in Table 2.

- Line (17) equals the sum of lines (14), (15), and (16).

- Line (18): Unfinished oils and gasoline blending components *Stock Withdrawal (+) or Addition (-)* equals stock withdrawal (+) or addition (-) for other hydrocarbons and alcohol, for unfinished oils, motor gasoline blending components, and aviation gasoline blending components.

- Line (20): *Other Hydrocarbons and Alcohol New Supply* equals the field production of same in Table 2.

- Line (21): *Refinery Processing Gain* is a balancing item equal to total refinery production minus total refinery input in Table 2.

- Line (23): *Total Other Liquids* equals the sum of lines (18) through (22).

- Line (24): *Total Production of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; plus crude oil product supplied in Table 2.

- Line (25): *Gross Imports of Refined Products* equals imports of LPG plus imports of finished petroleum products in Table 2.

- Line (26): *Exports of Refined Products* equals exports of LPG plus exports of finished petroleum products in Table 2.

- Line (27): *Net Imports of Refined Products* equals the difference between lines (25) and (26).

- Line (28): *Total New Supply of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; minus crude oil product supplied plus imports of LPG and finished petroleum products; minus exports of LPG and finished petroleum products in Table 2.

- Line (29): *Refined Products Stocks Withdrawal (+) or Addition (-)* equals the sum of stock withdrawal (+) or addition (-) for LPG and finished petroleum products in Table 2.

- Line (30): *Total Petroleum Products Supplied for Domestic Use* equals total products supplied in Table 2.

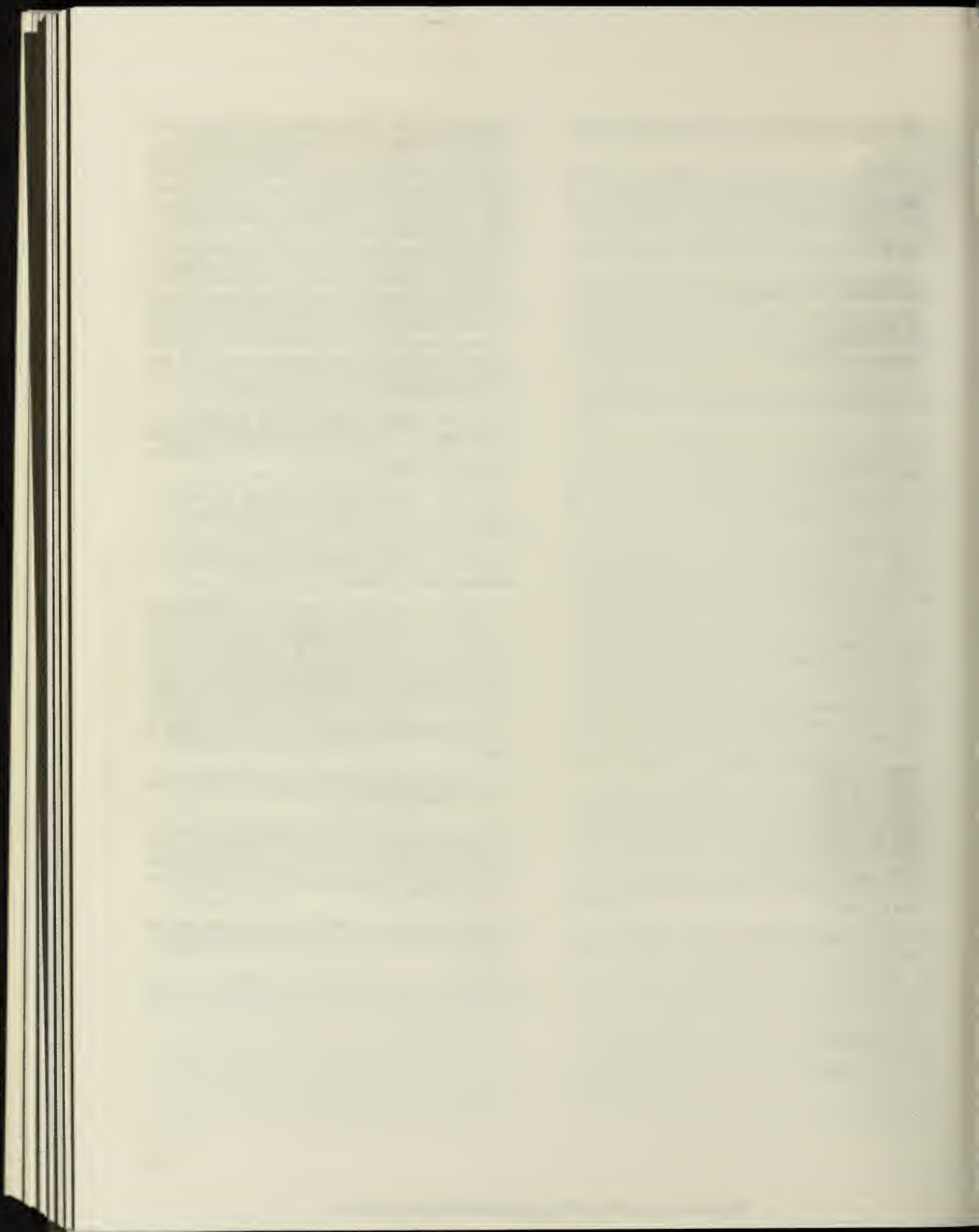
- Lines (31) through (35) equal the respective products supplied in Table 2.

- Line (36): *Other Products Supplied* equals the sum of natural gasoline and isopentane, unfractionated stream, plant condensate, aviation gasoline, naphtha < 400 Deg. F for petrochemical feedstock use, other oils > 400 Deg. F. for petrochemical feedstock use, special naphthas, lubricants, waxes, coke, asphalt, road oil, still gas, unfinished oils, motor gasoline blending components, aviation gasoline blending components and miscellaneous products supplied in Table 2.

- Line (37): *Total Product Supplied* is equal to total products supplied in Table 2.

- The sum of lines (38) and (39), stocks of *Crude Oil and Lease Condensate (Excluding SPR)* and stocks held by the *Strategic Petroleum Reserve*, equals ending stocks of crude oil in Table 2. SPR stocks are reported on Form EIA-813.

- Line (43): stocks of *Refined Products*, equals the sum of LPG and finished petroleum product stocks in Table 2.



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Energy Information Administration

Symposium on Petroleum Supply Information

Wednesday, August 24, 1983
8 a.m. - 3:30 p.m.
KEY BRIDGE MARRIOTT HOTEL
Arlington, Virginia

Keynote Address

"Energy Issues Facing the U.S.: A Policy Perspective"

Danny J. Boggs, Special Assistant
to the President for Energy,
Natural Resources, Environment
and Agriculture

Opening Remarks

J. Erich Evered,
Administrator
Energy Information
Administration

"Petroleum Supply Division Activities: Present and Future"

Frank E. Lalley, Director
Petroleum Supply Division
Energy Information
Administration



Morning Sessions

Session 1

10:20-11:50 a.m.

World Economic Changes and U.S. Oil Supply

Room A

Chairman: Jimmie L. Petersen, Director,
Office of Oil and Gas, EIA

- "Trends in Refinery Capacity and Utilization (Results of 1983 EIA Refinery Survey)"
Elizabeth Campbell, Economist,
Petroleum Supply Division, EIA
- "World Oil Price and Inventory Cycles."
Dr. John L. Moore, Deputy Area Manager,
Applied Management Sciences
- "Minimum Operating Inventories for Gasoline,
Distillate Fuel Oil and Residual Fuel Oil."
Richard D. Farmer, Economist,
Petroleum Supply Division, EIA

Session 2

10:20-11:50 a.m.

Availability of EIA Petroleum Supply Information: Surveys, Systems and Publications

Room B

Chairman: Dr. Barry M. Yaffe, Chief,
Data Analysis and Support Branch, EIA

- "EIA Petroleum Supply Surveys: An Overview."
Ronald W. O'Neill, Publications Branch,
Petroleum Supply Division, EIA
- "Systems Improvements: The Integrated Petroleum
Supply Data Base."
Robert Lesko, Vice President,
Technology and Information Systems,
Applied Management Sciences
- "New Data and Information Services."
John Daniels, Director,
National Energy Information Center, EIA

Afternoon Sessions

Session 3

1:30-3:30 p.m.

Current Petroleum Supply Situation and Outlook

Room A

Chairman: Dr. Wray Smith, Director,
Office of Energy Markets and End Use, EIA

- "The Current Petroleum Situation: Expectations for Fall and Winter 1983/84."
Albert H. Linden, Jr.,
Deputy Administrator, EIA
- "Outlook for World Crude Oil Prices."
Calvin W. Kilgore, Acting Director,
Short-Term Information, EIA
- "The Outlook for Transportation Fuels."
Dr. David Green, Group Leader,
Transportation Energy Group,
Oak Ridge National Laboratory
- "Intermediate Term Petroleum Projections."
Dr. John Pearson, Director,
Longer-Term Information, EIA

Session 4

1:30-3:30 p.m.

Petroleum Supply Data: Scope and Quality

Room B

Chairman: Dr. Yvonne M. Bishop, Director,
Office of Statistical Standards, EIA

- "Accuracy of Petroleum Supply Data."
Dr. Nancy Kirkendall, Statistician,
Petroleum Supply Division, EIA
- "Advances in Quality Control in PSD Data."
Dr. Lawrence A. Thibodeau,
Deputy Area Manager,
Applied Management Sciences
- "Liquefied Petroleum Gas Reporting."
Gary Oleson, Statistician,
Petroleum Supply Division, EIA
- "Statistical Design of the Weekly Petroleum Status Report."
Dr. Eugene Burns and Yahia Ahmed, Statisticians,
Petroleum Supply Division, EIA



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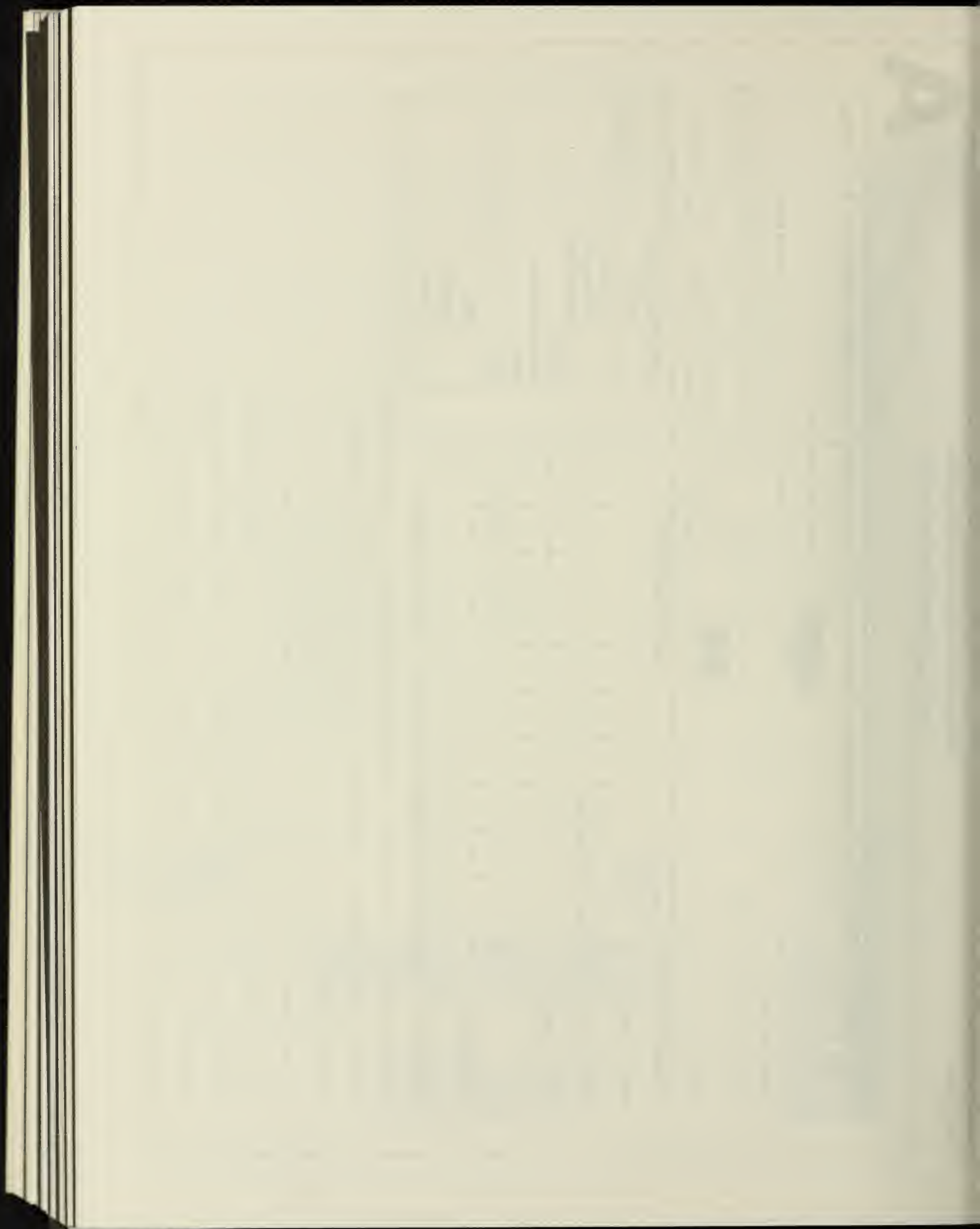
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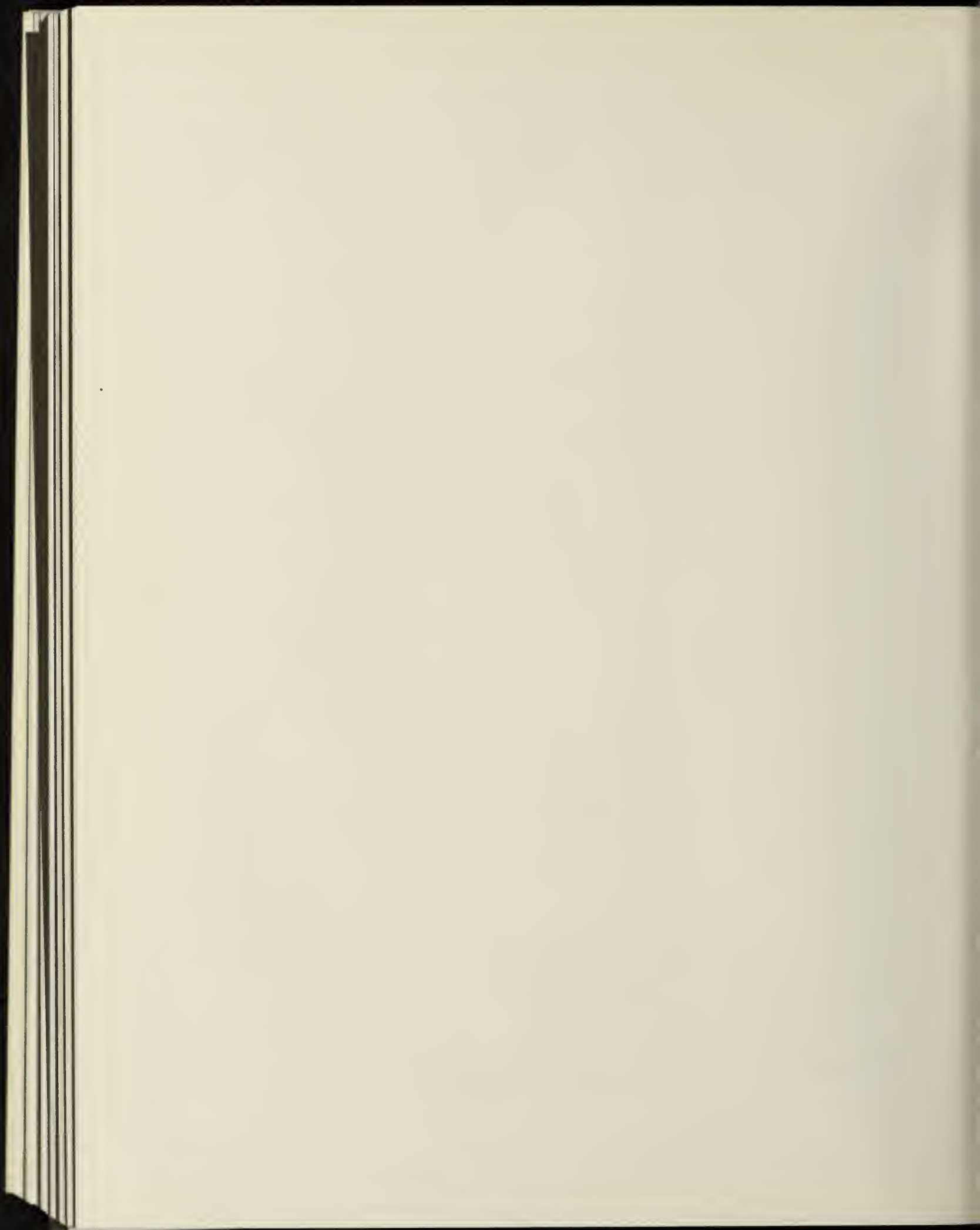
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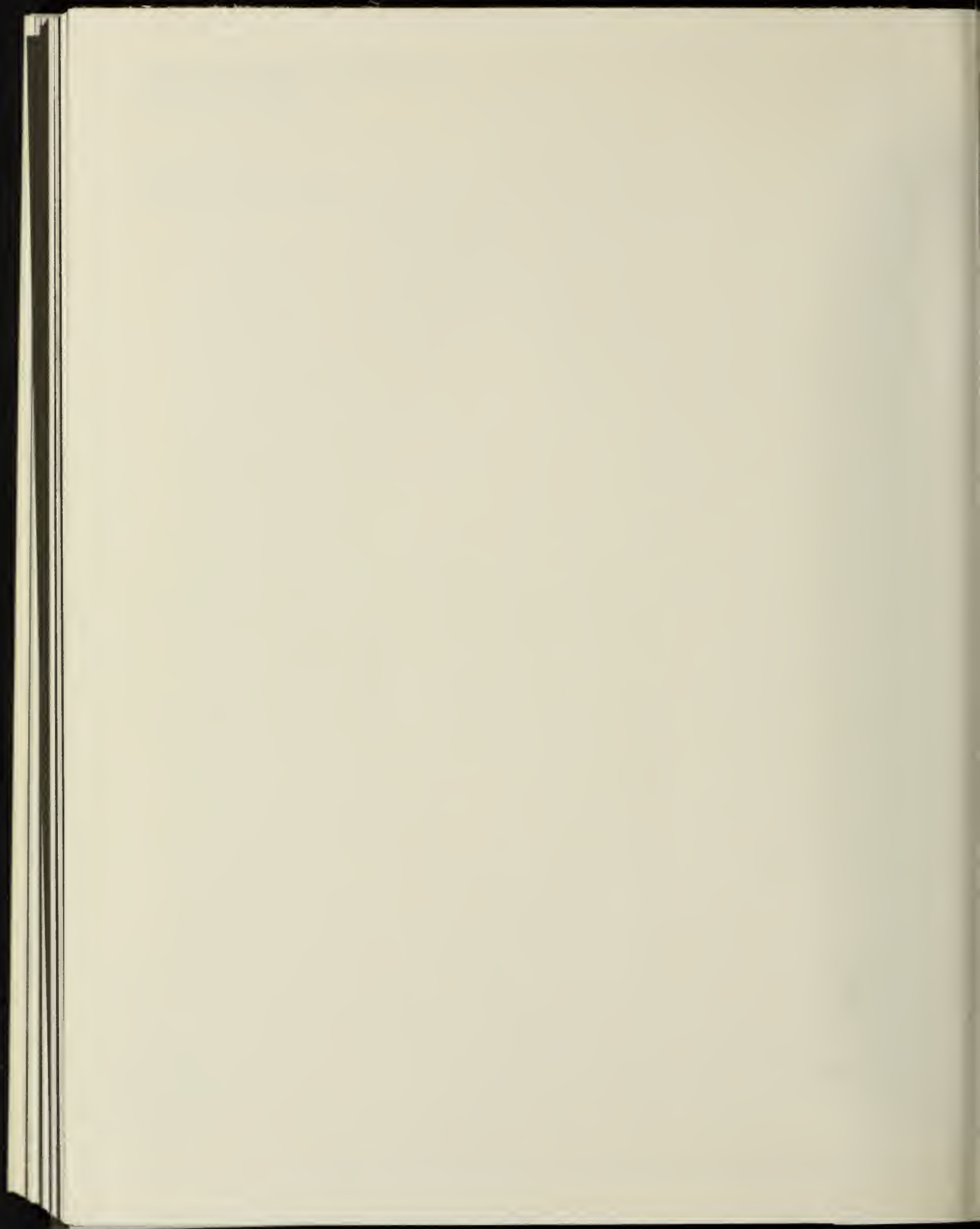
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